# Cyanide Operational Transportation Summary Audit Report

For The

International Cyanide Management Institute and Transportadora Moscato Transporte Rodoviário Ltda.

# 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 audit report contains 15 (fifteen) pages.

Celso Sandt Pessoa (BSc, MSc, MBA)/ Mechanical Engineer

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CREA/RJ/ Brasil # 55611-D (Engineer's Credential)

# 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.

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Name of Transporter: Transportadora Moscato Transporte Rodoviário Ltda. Name of Facility Owner: Transportadora Moscato Transporte Rodoviário Ltda. Name of Facility Operator: Transportadora Moscato Transporte Rodoviário Ltda..

Name of Responsible Manager: Antonio Moscato

Address: Rodovia BA-522, Km 1, 43.813-300, Candeias, BA, Brazil.

State/Province: Bahia/ Candeias.

Country: Brazil

Telephone: (55+71) 3602-3072

Fax: n.a

E-Mail: qualidade.sms@transmoscato.com.br

# Location detail and description of operation:

The Transportes Moscato operation is focused on the road transportation of hazardous chemical products (including cyanide containing effluents, solid NaCN and NaCN solutions), without interim storage. The operation transports cyanide for Proquigel Química Ltd. (a Brazilian cyanide producer, certified by the International Cyanide Management Institute). The operation is located at Candeias/ Bahia/ Brazil and transports hazardous chemical products inside Brazil, including hazardous chemical products to gold mine operations, beyond the cyanide. The operation has a documented SHEQ (Safety, Health, Environmental and Quality) management system which is applied to the road transportation of hazardous chemical products. The operation's trucks and flat platforms are specifically designed to transport chemical products, including cyanide containing effluents, cyanide solutions in iso-tanks and solid NaCN boxes inside sea containers. They are remotely monitored (100% during the travel between the seller and the final client) and equipped with an onboard computer, where text messages can be sent or received, beyond external and internal cameras, which allows the headquarter team to monitor, on-time, the cyanide transport. The operation drivers are qualified, based on the Brazilian legislation, to transport hazardous chemical products by road. Transportes Moscato does not sub-contract any service related to the transportation of hazardous chemical products.

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# 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 (Operational Transporter Protocol/ June 2021).

# Compliance Statement

"This operation has not experienced any compliance issues or significant cyanide incidents during the previous three-year audit cycle."

\* 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. (not applicable).

Auditing Company: NCABrasil Expert Auditors Ltd.(www.globalsheq.com) Audit Team Leader: Celso Sandt Pessoa (ICMI qualified lead auditor and transportation qualified TEA (technical expert auditor)), since 2006.

E-mail: <a href="mailto:celsopessoa@ncabrasil.com.br">celso@globalsheq.com</a>

Names and Signatures of Other Auditors: not applicable

Date(s) of Audit: 06~08/October/2021 (on-site) and 03/December/2021 (off-site).

# Auditor Attestation

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I attest that I meet the criteria for knowledge, experience and conflict of interest for a Cyanide Code Certification Audit Lead Auditor, 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 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 Cyanide Transportation Verification Protocol and using standard and accepted practices for health, safety and environmental audits.

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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:

All defined routes consider the population density between point A (cyanide seller) and point B (the mining operation). All routes are evaluated in accordance with its configuration and type of material cover (asphalt or concrete) and defines specific instructions to the drivers in accordance with the road configuration and available infrastructure. All identified routes clearly identify such aspects (pitch and grade), mainly because Brazil topographic configuration includes mountains. The presence of surface waters (sea, rivers, lakes), fog, rain among other natural aspects is identified in the route map. The operation designed, documented and implemented a management procedure to define the correct routes for the transportation of chemical hazardous products which consider the following aspects: population density, road infrastructure, road configuration (pitch and grade), environmental conditions (surface waters), road maintenance status, weight restrictions, support facilities (gas stations, hospitals, road police stations, weight control stations, firefighters). This protocol was updated in 07/May/2021, in conjunction with GEO Environmental Risks Ltd.

Related to cyanide transportation, the transporter developed eleven route diagrams for the transportation of liquid and solid cyanide from PROQUIGEL (an ICMI certified cyanide producer) to seven gold mines in the states of Bahia, (e.g- Yamana Gold Mining/ Jacobina operation/ ICMI certified), Brio Gold Mining/ Fazenda Brasileiro operation) and Minas Gerais (e.g-Kinross Brasil (ICMI certified), Jaguar Mining. Evidenced the route diagrams between Candeias (Proquigel facility) and Jacobina operation and Candeias (Proguigel facility) to Fazenda Brasileiro (Brio Gold Corp./ ICMI signatory), all route diagrams at revision 1, dated 07/ May/ 2021/06/2021. Also reviewed the route diagrams between Candeias and Kinross Paracatu (ICMI certified gold mine operation), Camaçari to Pilar de Goias (Pilar Gold Mining Corporation/ ICMI) and from Camaçari to Turmalina Mine/ Jaguar Mining. The route diagrams designing process is using high precision global positioning system and were evidenced in hard copies and electronic copies (installed at the SASCAR system (traceability and communication system) inside the truck. The electronic copy interacts with the driver all the time, alerting for the risks and the operational procedures to be followed, including speed control. Basically, the transporter uses state and federal roads, 100% asphalted.

All the real and potential risks of the selected routes are previously evaluated by the transporter, using the system defined at PRO-SSE-005(9) protocol. The transporter already transports other hazardous chemical products to the previously mentioned mining operations. Reviewed APR (preliminary risk analysis) for the a.m (above mentioned) routes, # 001/2021 (30/April/2021).

The transporter designed, defined and implemented a system (PRO-OPE-001(11)) to obtain feedback on the route condition from the drivers returning for the transporter HQ. There is a travel report (alert bulletin) that is reviewed by the operational coordinator, which includes the driver feedback about the route condition. Evidenced some cases of feedback in the selected routes dated 09/Sept/2021, 05/Sept/ 2021, 18/Jun/2021, 07/Nov/ 2020, 21/Mar/ 2020, 12/Dec/2019 and 18/ Jul/ 2019. All the operational controls are addressed at the route diagrams (hard and electronic ones) and includes speed control, driver qualification and training, truck and bug (flat platform) preventive maintenance, occupational health periodic monitoring, drugs and alcohol monitoring and emergency response procedures.

The transporter already interacted with several stakeholders, including public authorities linked with municipalities, road police, army, environmental agencies, civil defense, firefighters among others. Reviewed the following communication records between the transporter and external stakeholders, all updated in 2021:

- Santa Helena Hospital.
- PAME Coordination (mutual emergency response unit).
- Bahia State Firefighters.
- Bahia State Environmental Protection Agency.
- Jacobina Municipality Civil Defense.
- Bahia State Civil Defense.
- Barrocas Municipality.
- Nova Fatima Municipality.

For the selected routes, there is no necessity of security escorts, in accordance with the risk analysis records. The operation does not use security escorts nor convoys.

Transportes Moscato does not sub-contract any service related to the transportation of hazardous chemical products.

<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         |                        |

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Summarize the basis for this Finding/Deficiencies Identified:

It was evidenced that Transportes Moscato only employs trained and licensed drivers as required by the applicable Brazilian legislation for the road transportation of dangerous products including solid and liquid NaCN. The driver must have a specific driving permit type "E". Reviewed the driver permit for drivers that were selected to transport cyanide. Also reviewed the following specific trainings, as required by the Brazilian legislation: MOPP course (Hazardous Chemical Products Transportation), NR-20 (Health & Safety when working with flammables and combustibles) and NR-35 (working at heights). According to internal procedures and the Brazilian labor legislation. all the drives must pass a bi-annual alcohol and drug testing (that is performed annually by the operation) and also an annual occupational health examination (ASO). Reviewed the records for the sampled drivers (all approved in the drug & alcohol testing and in the occupational health examination). All training required by the Brazilian labor legislation for the road transportation of chemical hazardous products was already provided by the operation for the drivers. Proquigel (cyanide supplier) also provided specific training for Moscato's drivers, related to cyanide handling and transportation, environmental care, first aid procedures and emergency response procedures. Reviewed records dated 30/01/2020. The operation does not handle or operate any other type of handling, lifting or transport equipment such as cranes and forklifts. All handling activities are performed by the cyanide producer, during the loading of the truck, and by the mining operation when unloading the cyanide cargo. The operation drivers do not participate in any other activity beyond driving the 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 uses specifically designed trucks and bugs for road transportation of hazardous chemical products. The trucks are designed and produced by Volvo Trucks Brazil Ltd (model FH-540/ 6x4T or FH-460/ 6x2T) and by Scania Trucks Brazil Ltd. (model R440/ A6x2), and the bug (flat platform specifically designed for iso-container (or iso-tanks) transportation) are designed and produced by Randon Ltd Brazil or Fachinni Ltd. Brazil. Reviewed the mandatory documentation required by the Brazilian legislation for the road transportation of chemical hazardous products.

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Truck license PLN-6C15 (RENAVAM # 001.837.8630, dated 13/02/2020) and bug license PLA-8202 (RENAVAM # 011.520.594.80, dated 10/02/2021). Also reviewed bug license PLB-7353 (RENAVAM # 011.543.076.51, dated 09/04/2021), PLB-2653 (RENAVAM # 011.543.056.83, dated 04/05/2021), truck license PKU-5340 (RENAVAM # 011.380.899.12, dated 17/11/2020) and truck license PLN-5B66 (RENAVAM # 011.838.690.85, dated 13/01/2021). The operation implemented and maintains procedures to verify the adequacy of the equipment for the load they must bear as previously mentioned. Both, the truck and the bug configuration, are adequate to transport the iso-container (or iso-tanks) or a sea container. Usual cargo load is 24 ton. The bugs are designed to support up to 60 ton, and the truck is designed to transport up to 38 ton (law requirement). Basically, this is the 50% of the truck power capacity. The operation already implemented procedures to prevent overloading of the transport vehicles. The cargo weight is checked and confirmed when the truck is leaving the product seller premises and along the road, at weight control stations, where the weight and the cargo documentation is checked by the public authorities, and finally checked by the final client, before entering its premises. Reviewed pre-loading checklist dated 09/09/2021 for the truck PLF-9247 and flat platform (bug) PLB-5992. Reviewed Proquigel transportation record (DANFE/ NFe) # 0101436, dated 09/09/2021, where the cargo load (30 ton) is recorded and confirmed by the operation driver. Also reviewed DACTE Moscato # 188476 (dated 09/09/2021), transporting 30,8 ton for Kinross Paracatu mine (Proquigel weight ticket # 158120), DACTE Moscato # 188986 (dated 14/09/2021), for truck PKU-5340 + bug PLB-7490, transporting 34 ton of NaCN solution for LeaGold Mining/Riacho dos Machados/MG).

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

|                   | X in full compliance with        |                        |
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| The operation is: | ☐ in substantial compliance with | Transport Practice 1.4 |
|                   | □ not in compliance with         |                        |

Summarize the basis for this Finding/Deficiencies Identified:

The operation designed, documented and implemented operational procedures to ensure that the cyanide will be transported in a manner that maintains the integrity of the producer's packaging (iso-container (or iso-tank) for liquid NaCN solution and sea containers for solid NaCN boxes. In both cases the product containers are sealed before leaving the seller premises). The operation uses placards required by the Brazilian legislation for road transportation of hazardous chemical products. The iso-container is identified by the cyanide solution producer (Proguigel, an ICMI certified cyanide producer).

It was evidenced, during the field audit, that the operation uses the required placards required by the Brazilian legislation for road transportation of chemical hazardous products. Specifically, for the cyanide transportation it was evidenced that the operation uses the required placards (UNO number and hazardous product class 6.1). The operation designed, documented and implemented a pre-travel inspection procedure, based on a checklist, addressing critical aspects to be inspected, which includes driver and truck documentation, safety and emergency hardware, general condition of truck and platform, personal protective equipment and emergency kit. This inspection is performed in conjunction by a safety technician and the driver. For the cyanide transportation, beyond the previously mentioned aspects, the pre-travel inspection checklist, includes the inspection of the antidotes (provided by the cyanide producer), tracking and communication systems, load capacity, safety placards, fire extinguishers and earthing points. This inspection is done in the beginning of every travel day. The driver also performs a visual inspection of the truck, the flat-platform and the cargo, every three hours. The fleet assigned for cyanide transportation is very new (oldest pair was constructed in 2018). Beyond that, the operation designed, documented and implemented a preventive maintenance program, which is applied for each truck/ flat platform every 20.000Km (maximum for all new trucks/ this maintenance program is controlled by a specific software, which issues preventive maintenance work orders). There is a checklist with all the critical aspects to be checked and maintained. Reviewed such checklist adequately maintained by the operation.

The operation defined a maximum driving time of 10 hours, including one hour for lunch and a 30' rest every 5,5 hours of driving. The driver is not allowed to drive during all night (after 10 PM). All drivers must have 11 hours rest every day. The working hours is controlled through the remote tracking station.

The truck/ bug/ flat platform are specifically designed to transport iso-containers (or iso-tanks), sea containers and the bugs/ flat platforms have pin/ twist lockers, that are inspected by the driver before each journey, and prevent the containers from shifting. Evidenced during the field audit.

In accordance with the operation safety policies and the driver's operation manual, in the event of stormy or hard rain, fog, wind conditions, ice rain, the transport activity shall be stopped or even not allowed to begin. In some cases, the truck driver is oriented to stay in a safe place, previously defined in the approved route.

The operation designed and implement a drug & alcohol policy, 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.

It was evidenced that the operation 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, as previously mentioned. The operation 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 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 solid cyanide road transportation. Transport Practice 1.6: 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: (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 tracking systems (on board computer/ tablet, text messages and spoken route information, panic and fatigue button), using GPS signal (supplied and managed by SASCAR Ltd). The driver is also equipped with a mobile phone. Evidenced and tested during the field audit.

The communication system (GPS, mobile phone, tracking system, spoken route system) is tested before each travel, and periodically checked during the trip. Evidenced during the field audit. All potential or real blackout areas are previously identified during route identification and definition. Before entering such areas, the drivers contact the organization headquarters and the SASCAR central. The drivers are contacted, at least, six times during the daily travel. The truck is monitored 100% during its journey. As previously mentioned, the truck is monitored 100% of the time, by a remote-control station, by the operation headquarters and the tracker provider. The transport vehicle is provided with tracking systems (on board computer), using GPS signal (supplied by SASCAR). The operation already defined and implemented a chain of custody records management, according to the Brazilian legislation law. The documentation (Seller DANFE, transporter DACTE, Brazilian Army permit, MSDS, travel plan) is verified prior the transportation and before the unloading at the client premises.

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All recorded and annexed at travel reports, that are retained at the organization central office. Reviewed specifically the custody records related to Proquigel DANFE # 0101436 (dated 09/09/2021) and Moscato DACTE # 188476 (09/09/2021), Proquigel DANFE # 0101574 (dated 14/09/2021) and Moscato DACTE # 188986 (14/09/2021), Proquigel DANFE # 0095735 (dated 25/02/2021) and Moscato DACTE # 174019 (dated 25/02/2021), Proquigel DANFE # 0091671 (05/10/2020) and Moscato DACTE # 162377 (05/10/2020), all addressing the chemical product being transported, producer, amount, weight, seal # and final destination (client). As previously mentioned, and according the Brazilian legislation, the transport documentation clearly identifies the amount of hazardous chemical product being transported and the product MSDS is part of this documentation. Evidenced during the field audit the following documentation: Proquigel's MSDS UNO # 1935/ risk number # 66, risk class 6.1 (NaCN). All travel documentation is kept inside a specifically designed envelop.

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.

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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 cargo is transported straight from the producer to its final destination. During the transport, the truck is monitored 100% of the time and stops, at night, only 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.

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 developed, documented and implemented an emergency response plan, PRO-SSE-001(12), which is a general cyanide related emergency response plan, addressing information provided by the cyanide producer and the cyanide MSDS, information from the ABIQUIM (Brazilian Chemical Industries Association) emergency manual, contact information and potential emergency scenarios. All the emergency response information is also addressed at the Driver's Manual. The operation has a contract with an emergency responder, Ambipar Response Brasil Ltd., which also has a specific emergency response plan for the cyanide transportation (contract # 14795, dated 27/04/2021). The operation has this contract with Ambipar due to contract clauses with Proquigel Química Ltd. Ambipar Response team will have a secondary role in the emergency response, which will be led by the operation's emergency response team. The above-mentioned plans are specific for the routes mentioned at Transport Practice 1.1. It was evidenced that the plans are specific for the road transportation of solid cyanide and cyanide solution. It was evidenced that the plans are specific for the road transportation of cyanide, by truck. (flatbed trailers/ platforms and bugs, with pin/ shift/ twist lockers, specifically designed to transport metallic sea containers or isocontainers/ iso-tanks). It was evidenced that the plans consider the specific conditions of the selected routes and the risk analysis performed for the selected 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, also considering the available infrastructure and resources available in the selected routes. It was evidenced that the emergency response plans are specific for the truck configuration that is used to transport the cyanide (flat bad trailers/ platforms and bugs, with pin/shift/twist lockers, specifically designed to transport metallic sea containers and iso-containers/iso-tanks). It was evidenced that the emergency response plans 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.

The operation driver's, if not injured or dead, after dressing his PPEs (Personal Protective Equipment), will isolate the area, contact the operation base and declare the emergency. He will act as a liaison with other stakeholders such as Brazilian Federal and State Road Policy, Road Administration representatives (when applicable), firefighters, medical teams, among others. In the event of a minor incident (e.g- isocontainer valve leakage/dropping), the driver, wearing his PPEs will isolate the area, communicate the issue to the operation headquarter, collect the leakage with plastic drums and neutralize, with CaO powder, any leakage that impacted the soil and will wait for rescue. It was evidenced that the emergency response plans describe the roles of several stakeholders that should be involved in the emergency response, such as federal road policy, emergency responders and rescuers, first aid stations along the route, reference hospitals, and environmental authorities.

# <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 provided emergency training for drivers, emergency coordinators, emergency response members on the PRO-SSE-001(12) emergency response plan. Reviewed training records dated 08/08/2020 and 04/09/2021. Please also refer to emergency drills. All duties and responsibilities, for each identified scenario, are addressed in the emergency management plans. The required emergency response hardware master list is part of the traveling documentation and checked before each travel. Usual emergency hardware to be available at the truck are full face mask, breather, safety glasses, helmets, nitrile gloves, PVC boots, ear protectors, overall type B (Tychem) and C (Tyvec), fire extinguishers and antidotes provided by the cyanide producer (sodium nitrite injection USP and sodium thiosulfate injection USP both approved antidotes for cyanide intoxication). Before every trip, all required emergency response equipment is inspected in accordance with a specific checklist. that is part of the trip documentation, as previously mentioned. The inspection is performed by a safety technician and the driver. The antidote kit is provided by the cyanide producer, Proguigel Química Ltda., and given back to the cyanide producer after the journey. The cyanide antidote kit validity is controlled by the cyanide producer. The cyanide antidote kit does not remain at the operation headquarter. The cyanide antidote kit is delivered inside a sealed plastic box, with use instructions, signed-off be the cyanide producer occupational doctor, to be applied only by medical professionals (medic, paramedic or nurses). The operation drivers are not allowed to apply cyanide intoxication antidotes.

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

| The operation is | X in full compliance with ☐ in substantial compliance with | Transport Practice 3.3 |
|------------------|--|------------------------|
| The operation is | □ not in compliance with                                   | Transport Fraction C.O |

Summarize the basis for this Finding/Deficiencies Identified:

The operation maintains a documented contact master list containing the contact number of the mine operations, the cyanide producer, public authorities (municipalities, road police and state firefighters), health centers (hospitals) and the emergency responder (Ambipar Response). Evidenced at the Driver's Manual INS-OPE-002 (5) and at the emergency plan PRO-SSE-001(12). The operation implemented a system to maintain the contact information updated, including emergency notification and report. Emergency response plan was found at revision 12 and the Driver's Manual at revision 5. Ambipar Response (emergency responder) plan was found at revision dated 27/04/2021. The operation has all ICMI's contact information (e-mails, telephones, address). In the last three years there were no cyanide related incidents requiring notification to ICMI.

# <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        |                        |
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| The operation is: | ☐ in substantial compliance with | Transport Practice 3.4 |
|                   | □ not in compliance with         |                        |

Summarize the basis for this Finding/Deficiencies Identified:

It was evidenced that the previously mentioned emergency response plans describe the specific response actions, including neutralization procedures and recovery of impacted soil, that shall be applied to each emergency situation/ scenario, such as accident with fire, fall into a river, cyanide leakage on a rainy day and cyanide intoxication (reviewed Proquigel procedure # SOC-P-05(9), reviewed and approved by Dr. Alexandre Rodrigues (toxicologist), with is part of the traveling documentation also). It was as evidenced that the operation emergency response plan clearly defines that chemical products, such as sodium hypochlorite, ferrous sulfate and hydrogen peroxide, are prohibited to be used in the event of solid / liquid cyanide releases in surface waters along the defined route. Ambipar's Emergency response team will have a secondary role (support) in the emergency response that will be led by the operation emergency response team. All the emergency response will be coordinated by the operation response team, following the operation emergency response plan.

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<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 operation already implemented a system to review its emergency response plan which includes feedback from the driver, indicating any necessary challenge in the route map, in the risk analysis or in the emergency response plans, after emergency drills and after real or potential incidents. Feedback from the cyanide producer is also an input to maintain updated the emergency response plan. The operation planned and implemented a system for emergency drills realization. Three emergency drills were performed since 2019. The first one, not involving cyanide, but another hazardous chemical product, was performed on 10/04/2019. The second one, not involving cyanide (but other hazardous chemical product), was performed on 14/01/2021. The last one was performed on 21/09/2021. The cyanide producer was involved in this drill, providing two iso-containers of NaCN solution, simulating that was a leakage in one iso-container, impacting the soil and potentially exposing persons and wildlife to cyanide solution, and the product was transferred to the other iso-container. The emergency responder (Ambipar Response) also participated in this drill. The operation personnel (drivers, emergency coordinators, safety technicians), effectively participated in the drills. The emergency drill objectives were clearly defined and included the evaluation of the theoretical plan would work in a real situation and the planned response observation of all involved stakeholders. Conclusions were addressed in the emergency drill report (please refer to TP 3.5.3). The operation implemented a system to review the emergency drill results. Reviewed Ambipar report # 50347 and Moscato report dated 21/09/2021. Opportunities of improvement were identified and are being implemented. Both emergency plans will be updated. After the drill mock, the drill results are reviewed by the stakeholders that participated in the drill and, when identified, opportunities of improvement are defined and implemented. The specific emergency response plans are promptly updated (all ones were updated in April 2021).

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