

# **CIATEITE S.A.**

## **CYANIDE TRANSPORTATION SUMMARY AUDIT REPORT FOR THE**

### **INTERNATIONAL CYANIDE MANAGEMENT INSTITUTE**

MAY 2024

This report was written by: Bruno Pizzorni – Lead Auditor



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## Operation General Information

Name of Cyanide Transportation Ciateite S.A.  
Facility:

Name of Facility Owner: Grupo Torres y Torres

Name of Facility Operator: Ciateite S.A.

Name of Responsible Manager: Fausto Moreta Tomsich – General Manager

Code Certification Leader: Bolívar Fajardo - Corporate Head of Risk Management

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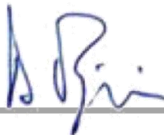
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## Location and Description of the Operation

Ciateite S.A. (Ciateite) was established in 1998 to provide road freight transport services Ciateite is a company of the Grupo Torres & Torres, a conglomerate of companies dedicated to providing integral logistics services, heavy cargo transport by road and foreign trade since 1995

The company, with more than 22 years of experience in operations and a fleet of 100 owned vehicles has two logistics yards: the first called Bunker Operations Logistics Center strategically located 10 minutes from the Guayaquil port in Ecuador, has 10,000 m2 and equipment of two container ships, which allows the logistical handling of full and empty containers. The second is located in the north of the city, in the industrial zone of Guayaquil. Both sites have 24/7 security and closed-circuit cameras.

Grupo Torres y Torres continuously invests in the training of professional drivers being the first in the implementation of a virtual simulator, unique in the country for the training and qualification



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Ciateite currently has about 100 employees. Since 2005, the company has been certified in Business Alliance for Secure Commerce (BASC) safety processes and ISO 9001 quality certification, and also has an environmental transport license for hazardous materials.

The company offers the service of transport of heavy import and export cargo from the Maritime and Air Cargo Terminals of Ecuador to different national destinations where the wineries of its customers are located. Ciateite provides 20- and 40-foot, loose-cargo, refrigerated container, and oversized cargo shipping services in special equipment. The transport of sodium cyanide is carried out with its own fleet.

The company operates a modern fleet of heavy hauling equipment, which are updated on a regular basis, so they meet the customers' requirements and needs. Ciateite trains drivers in defensive driving, handling of dangerous goods and other specialized training. Drivers are certified in dealing with hazardous materials.

Ciateite has a broad range of transport services, all trucks are equipped with GPS tracking for position, safety and efficiency control. All of its vehicles are satellite equipped to provide real time tracking of shipments from pick up at the port of Guayaquil until delivery to the mine sites.

Ciateite has selected and evaluated a primary route to each consignee. Details of the evaluation process are provided in this report. Because of the presently served mines' remote locations, with little exception, there is only one route.



### Auditor’s Finding

The International Cyanide Management Institute (ICMI) approved Auditor verified that **Ciateite S.A. is in Full Compliance** with ICMI Cyanide Code requirements for Transport operations.


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

### Auditor’s Information

Audit Company:	Cyanide Auditors S.A.
Lead Auditor and Transportation Technical Auditor:	Bruno Pizzorni E-mail: <a href="mailto:bpizzorni@cyanideauditor.com">bpizzorni@cyanideauditor.com</a>
Date(s) of Audit:	December 12 and 13, 2023

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



## Cyanide Transportation Verification Protocol

### Principle 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.*

- in full compliance with
- The operation is  in substantial compliance with Transport Practice 1.1
- not in compliance with

To select the transport routes Ciateite has the Instructive Analysis, Selection, Risk Evaluation and Authorized Stop and the procedure P-PE-009 Risk Assessment. After this analysis they elaborate the route plan for each destination. This procedure provides the identification of critical factors in the field in order to assess traffic risks and safe stops and thus reduce the likelihood of accidents, road damage and the environment, and in the case of any event materializing, mitigate the severity of the damage caused, as well as preserve the integrity of the load and compliance of the operation. Instruction, among other potential impacts of accidents and spills, considers population, conditions of roads, pitch and grade, proximity of water bodies and areas with prevalence of fog.

Route analysis is the responsibility of the Security Committee, with the Head of Security (Committee Leader), Fleet Supervisor and Head of Safety, Health and Environment being authorized to carry out, approve and broadcast to staff until the respective identification on the web platform is ensured by the Security Console for monitoring operations.

The route analysis is performed according to the format F-GR-005 Route Sheet - Analysis and Evaluation of Routes where it is recorded:

- Population densities for the route assessment phase are categorized into low, medium and high
- Traffic density contemplates the influx of the presence of trucking equipment and heavy machinery (related to the presence of industrial, agricultural and mining sectors).



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- Track conditions contemplates the review of lighting, signage, dimension and condition of the track
- Track design contemplates the presence and characteristics of curves, bridges and senses, berms and slopes. is reviewed by visual inspection during routing
- Risk zones such as collapses and slippages. It is reviewed by visual inspection during routing and zone identification signaling, its presence must be recorded in the format.
- Water and fog masses are checked by visual inspection during routing, its presence must be recorded in the format.
- Red zones with high crime rate are also identified under the criterion of searching for information with the media authorities, criteria of security providers, and statistics of assaults on the tracks.
- Police support points and vehicle control detachments is reviewed by visual inspection during routing. Its presence must be recorded in the format, validation can be supplemented on government pages, this inspection of checkpoints must be carried out each year to verify its operation.
- Medical Centers are identified prior to routing and is in charge of the Medical Department, who according to the breakdown of the route will have to locate through government pages and those available by internal insurance, the nearest medical centers and at the distance they are to be validated if required.
- Technical-mechanical assistance points are checked by visual inspection during routing and zone identification signaling, its presence must be recorded in the format.

The Auditor reviewed the route plans for the transportation of cyanide Guayaquil – Zamora Guayaquil and Guayaquil – Lunin Gold Fruta del Norte, the latter by sea containers and isotanks. For the evaluation, they record in the worksheet the mileage of the route where the identified risk appears, subsequently establishing the necessary control measures. The assessment is updated annually, previously it was done biannual. Records were available to demonstrate that both current routes were assessed and approved during this certification period.

The Instructive for Analysis, Selection, Risk Evaluation and Authorized Stops includes performing route risks identification. Based on this document, the Instructive for Execution of Safe Transportation, section 5.2.2 Risk Analysis by Operation, lays down provisions to assess the characteristics of the products to be transported on a work order in order to assign safety measures during transport in order to preserve the integrity of the cargo. Risk are categorized by colors, being sodium cyanide shipments in code blue color, categorized as the highest risk product category to



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transport. In Section 5.2.2.2 Controls Assigned by Risk Code, an item dedicated for cyanide transportation, lists the measures necessary to manage these risks. Records were available to demonstrate that the routes were assessed during this certification period.

Section 5.3. Periodic Route Assessment of the Instructive for Analysis, Selection, Risk Evaluation and Authorized Stops, states the routes reevaluation will be performed under the same initial analysis methodology and its updating will be carried out annually or as needed (Report of internal or external developments).

Interviews with drivers and management personnel were used to confirm that feedback about driving conditions is communicated, which is useful for continuous getting feedback on routes condition. Risk Register versions performed during this certification period were available for the auditor's review.

Ciateite documents the measures taken to address risks identified with the selected routes. Risk mitigation measures are noted on the route documentation. The dispatch orders indicate the routes. Risk mitigation measures focus primarily on the avoidance of social unrests, high traffic times of day and the avoidance of roads that are dangerous in poor weather conditions. A driver was interviewed and showed good awareness of risk mitigation measures necessary for driving through populated areas and parking overnight on route to a customer site.

The elevated levels of risk are reinforced or controlled through training and follow-up to the activities of the responsible driver personnel. The transporter use the Risk Analysis to document the measures taken to address the risks identified with the selected routes. Then train the drivers, summarizing the necessary control measures that have been developed to address risks along the selected route. Features such as sharp turns, areas of proximity to surface water and areas near population are taken into account. The auditor reviewed the Risk Analysis worksheets, the drivers training material and assistance records that addresses management of risks along the selected route.

Ciateite interacts with communities, governmental agencies en emergency responders in the development of risk management measures. Also, the evaluation of routes and as an alert for day-to-day operations, ECU 911 is available as a source of information for the latest developments in the country's roads (<https://www.ecu911.gob.ec/consulta-de-vias/>), to know general states of roads and implications of transit through public works in development (<https://www.obraspublicas.gob.ec/>); in addition to that provided by tolls. ECU 911 is the Integrated Security Service, the immediate and comprehensive emergency response service in the Ecuadorian territory that coordinates the attention of articulated response agencies, for cases of claims, disasters and emergencies, mobilizing available resources to provide rapid attention to





citizens.

During the route evaluations, Ciateite establishes contact with entities such as the UPC (Community Police Unit) who indicate the emergency contact numbers and inform about the areas of criminal risk. The auditor reviewed the UPC report for the route Guayaquil – Zamora , also reviewed a report from the Fire Department. Ciateite asks external responder if they have knowledge of emergency response to cyanide spill or exposure to it. They also interact with the CTE (Ecuadorian Transit Commission), as well as with hospitals, asking if they know first aids procedures and if they have antidotes to respond to cyanide exposures.

Records were available to demonstrate that they meet with local stakeholders where they have opportunities to seek feedback on the route risks to plan the cyanide transport operations.

For high-risk or value products(set as blue code) including cyanide transportation, Ciateite requires as first option to consider an alternate route, if this is not possible, a preventive measure should be implemented according to the approach applied, such as: "Use of convoy for security", "Use of Convoy Leader as a warning of road status and third parties".

Ciateite transports the cyanide in convoys, although not necessarily with escorts. When the amount of sodium cyanide is greater than 6 sea containers or isotankers, they use a 4x4 van as an escort, with one person, accompanied eventually by an operational supervisor. Shipments such as cyanide are assigned code blue to monitor them more frequently. The trucks have video cameras that record permanently, they only stop in pre-established safe places. The auditor reviewed the Safe Transportation Execution instructions. Also, as an additional security measure, transport vehicles should only park in authorized security spots. There is a restriction on driving schedules, it is only during the day, for safety in the face of the high crime rate. The interviewed driver confirmed all the cyanide operations are performed in convoys. Trip reports and recommendations are provided by convoy supervisor in the report issued for each trip.

Ciateite does not subcontract any portion of their cyanide transportation operations. Tractors and trailers are owned by Ciateite, drivers are its employees. The International Cyanide Management Code (the Cyanide Code or the Code) requirements pertaining to subcontractors are, therefore, not applicable to the organization.



### 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.*

- ✓ in full compliance with
- The operation is  in substantial compliance with Transport Practice 1.2
- not in compliance with

Ciateite works only with qualified and licensed drivers. To be able to qualify as a driver in Ciateite, they must be passing the company’s evaluation as for experience and test of driving, police records and medical examination, among others. Drivers have E type driver's license that authorizes them to carry heavy cargo. Drivers are required to be continuously trained to maintain their driver credentials. Additionally, they must have an environmental license granted by Ciateite to transport hazardous materials. An annual certificate of renewal of transport of hazardous substances is also required. According to local regulations, all drivers must pass psych technical and a medical examination to be able to drive.

The Human Talent Area evaluates the personnel who enter. Drivers must go through a medical examination according to the position they are going to hold. For drivers, the medical examination includes audiometry, visual, electrocardiogram and neurological study, among other necessary tests as prevention for driving. Records were reviewed covering the certification period and found to be acceptable.

All drivers operating cyanide transport equipment receives initial training, refresher and on-going training to perform their assigned tasks in a safe and environmentally sound manner. For cyanide transportation and other hazardous substances, drivers are required to take training in the environmental course, as required by local regulations, which is valid for 2 years. Drivers with more than two years with the company receive basic hazardous materials (HAZMAT) training to be refreshed every two years.

Drivers are also trained in defensive driving, firefighting, first aid, sodium cyanide and its emergencies (cyanide spill and poisoning). The convoy leader must have transport background, to be knowledgeable on basic mechanics, and leadership qualities. The current convoy leaders have over five years of experience escorting hazardous materials convoys.

Ciateite has an electronic simulator station, a sophisticated tool and software to ensure drivers



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abilities and to reinforce the driving practices. In this tool they can enter the driving parameters of any new vehicle, so that the driver becomes familiar for example, with the gears and power of the vehicle in various scenarios. They have two experienced drivers as the simulator instructors, who evaluate the driver by this means upon entering the company.

The auditor visited the simulator where he received a demonstration of his capabilities, reviewed the Description of the Driver Position where the necessary requirements for a driver to work in the company transporting hazardous materials, among others, are indicated.

The auditor reviewed training and test records over the last three years, to verify that drivers who have transported cyanide have completed the training and passed the test. The auditor reviewed the training material, online access for the trainees and assistance records, kept by Ciateite's Human Talent Area.

Transport Practice 1.3

*Ensure that transport equipment is suitable for the cyanide shipment.*

- in full compliance with
- The operation is  in substantial compliance with Transport Practice 1.3
- not in compliance with

Ciateite uses equipment designed and maintained to operate within the loads it will be handling. Before buying any equipment, they perform a technical study to determine the characteristics of the vehicle needed, taking into account the engine power, haul and cargo capacity, torque, transmission capacity to the last axis. Trucks and trailers were reviewed during the audit. All available tractors and trailers have been checked and were rated for weights that exceed maximum loaded weights. The load capacity of the trailers used by Ciateite is around 30 ton, larger than the gross weight of an ocean container fully loaded with cyanide which is approximately 22 t. Tractors haul capacity is 60 tons, with 400 – 500 horsepower (hp).

The transporter was able to demonstrate with records documenting the load-bearing capacities of its transport equipment, its maximum cyanide load weight available and having in place appropriate specifications for equipment and parts that may be replaced during maintenance.

In addition to ensuring that the manufacturer's rating of the loading capacity of transport



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equipment is adequate, the transporter also verifies that the load bearing capacity of its equipment is adequate by inspecting and testing its equipment to identify signs of stress or overloading. This is done as part of the transporter's routine inspection and preventive maintenance inspection program.

Equipment was found to be in particularly good condition and was deemed suitable for delivering solid cyanide. The tractors and trailers are enhanced with upgraded equipment and heavy-duty frames to ensure safe travel over rough terrain to the mine sites. Tires are replaced on a frequent basis and regular maintenance activities and inspections are conducted.

The auditor reviewed the trucks and trailers inspection records which includes checking for platforms twist locks, top deck, king pin, chassis structure, axis and wheels, among others. Also reviewed work orders and invoices for the work done as grease points, loose things, lights, brakes and suspension. The interviewed with maintenance personnel and equipment operators confirming compliance with this provision.

To prevent overloading of the transport vehicle, Ciateite has established that each platform will be loaded with only one cyanide container and that each truck can only haul one platform trailer. This is consistent with the information included in the inspection checklist and was confirmed during the interviews.

Loading is done by the port operator using scales to confirm the shipment weight. The loads being hauled are standard loads that do not vary in weight. Records were checked against weight capacities and weight limit regulatory information. The equipment is capable of transporting loads more than the maximum loads shipped. The regulatory limits on truck weight are typically the limiting factor that dictates the maximum amount of cyanide that can be transported. Office personnel and driver showed awareness of weight capacities and regulatory requirements pertaining to maximum truck weight allowed.



### Transport Practice 1.4

*Develop and implement a safety program for transport of cyanide.*

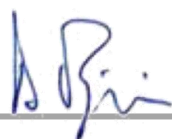
- ✓ in full compliance with
- The operation is  in substantial compliance with Transport Practice 1.4
- not in compliance with

Ciateite transports only solid cyanide in sealed sea containers and isotanks . Normal safe driving procedures and unloading procedures ensure that the truck and the trailer are not damaged during transit. The auditor reviewed transport procedure I-GR-004 Instructions for the Execution of Safe Transport establishes that the load cannot be altered during the transportation process. To ensure this, tags are placed in the ocean container’s locks at the manufacturing facility. These tags can only be removed at the mine. The containers received in the port are placed on platform trailers hauled by trucks without the need of changing the packaging. Per the interviewed personnel, the load is not removed from the container. Provisions to review during the transport journey the integrity of the seals on the doors of the maritime containers with cyanide are included in the transport procedures and in the inspection checklist. Ciateite also sent completed inspection records showing the integrity of seals are being inspected during the transport journey after the convoy stop. The auditor also reviewed the P-GM-001 Procedure for the Transport of Hazardous Chemical, reviewed the inspection records verifying these are performed and that each record is signed off by the responsible supervisor.

Appropriate placards showing UN 1689 (solid cyanide) are displayed on all four sides of the sea containers. Placards are installed by the shipper’s personnel and a visual inspection is performed by Ciateite drivers. Sea containers and isotanks are marked on all four sides with proper placards and other signage identifying the DOT (Department of Transportation) Hazard Class 6. The number UN 1689 is displayed in lieu of the words “Toxic” or “poison”, and Marine Pollutant markings are also applied by the shipper. Drivers visually inspect the containers prior to each movement. Equipment markings were found to be adequate and conformant.

The transport procedure establishes that placards with cyanide’s UN number and poison signs must be placed on the container; this is verified through the vehicle inspection checklist. Per the reviewed operation files, the presence of the placards was verified through the checklist.

Ciateite has a safety program for cyanide transport. Drivers conduct a pre-trip inspection before



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the vehicle departs to the port facility for loading (documented through the vehicle inspection checklist). Mechanical defects are called to the attention of the on-site mechanics. Issues that would affect safety and/or legal compliance are resolved prior to movement off-site. Driver interviewed demonstrated knowledge of the process of performing pre-trip inspections. Pre-trip inspection checklists were reviewed and found to be acceptable.

Ciateite has a Maintenance Program for their vehicles for preventive and corrective activities. The maintenance program was reviewed and found in compliance.

The working day of drivers traveling with sodium cyanide may not exceed twelve hours a day discontinuous, allowing stoppings every two to three hours for ten minutes or more for equipment review, feeding and active stops. According to procedures, the transport will only be carried out during daytime hours.

The load shifting within the container is not considered possible as all containers are filled with 20 boxes and block and brace is applied at the cyanide production plant to prevent load movement. At the same time, trailers have pins where the container is embedded preventing it from shifting. Cyanide travels in sealed containers, which are secured to the platform safely, eliminating the possibility of displacement during transport. In the same way, trailers transporting isotanks have pins where the isotank is embedded preventing it from shifting.

According to the sodium cyanide transport procedure the transport can continue only if the leader of the convoy has provided the relevant conditions. The supervisor of the convoy informs the state of progress of the operation and any event in each one of the points indicated in its itinerary, and any event requiring stopping the convoy. If conditions are not favorable to allow the convoy to reach its destination, it will be parked in an appropriate place.

Before each trip, the employee must undergo alcohol testing and periodically through a drug test. Violation of this policy has resulted in the separation of the worker from the organization.

Records were available to demonstrate that all the requirements of the implemented safety program for cyanide transport had been fulfilled. Records are maintained in hard copy at the office for a period. All records reviewed by the auditor were found to be complete.



### Transport Practice 1.5

*Follow international standards for transportation of cyanide by sea.*

- in full compliance with
- The operation is  in substantial compliance with Transport Practice 1.5
- not in compliance with

No shipments are made by sea on this transportation operation. Ciateite receives the cyanide shipments upon release of the cargo by the port authorities. The scope of this audit is for the ground transportation operations performed by Ciateite from Guayaquil port to the mines site.

### Transport Practice 1.6

*Track cyanide shipments to prevent losses during transport.*

- in full compliance with
- The operation is  in substantial compliance with Transport Practice 1.6
- not in compliance with

Cyanide shipments are tracked using a Global Positioning System (GPS) tracking system that is monitored by Ciateite. The convoy leader is provided with a cellular phone and a satellite phone if necessary to communicate with Ciateite’s Security Console, the mining operation, the cyanide producer or distributor and/or emergency responders. The convoy leader has also a radio and he is responsible of communications with Ciateite in case of an emergency. The drivers also have cell phones as a back-up means of communication.

The auditor verified that Ciateite drivers and convoy personnel carry cellphones as communications equipment, and the Convoy Leader has a satellite telephone. Drivers have the company's emergency numbers on their cell phones. The Convoy Leader carries a complete contact list in the Emergency Response Plan, with pre-determined contact information of the appropriate individuals, organizations, and entities along the route, as necessary to mobilize the appropriate response capabilities.



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All communication equipment available is tested periodically. The transport procedures address the requirement for such testing to ensure that it is done. Transport procedures require convoy and drivers to test their radios/cellphones before leaving the ports and keep them in constant use during the trip to the mines. The operation routinely tests the GPS tracking system to ensure it is functioning properly. Before each cyanide shipment departure, all trucks GPS signals are checked by Ciateite's Security Area with the Dobra software tracking system. If any equipment malfunctions, operators notifies Ciateite who will coordinate for equipment replacement. The auditor confirmed also that the cyanide transport procedures are being implemented reviewing the pre-trip checklist records requiring to check communications equipment for each shipment.

Communications blackout areas are identified in each route risk assessment. The transporter's procedure Instructive for Safe Transport describes procedures implemented for the blackout areas. For these routes it is required in the procedure to have two-way radios in each vehicle of the convoy to allow communications between them. The Emergency Response Plan (ERP) states that if the vehicle do not show after an estimated time in the blackout area, an emergency protocol is activated. Ciateite's control room has set geofences identifying these places and they expect to recover communication with the convoy after an established time.

Ciateite has a communication and GPS tracking system provided by contractor HS SD Sotec and also WhatsApp groups which allows continuously monitoring of the location of the convoy. Ciateite Security Area continuously follows the shipment along the route by mean of the Dobra platform. The convoy leader communicates Ciateite upon dispatch, upon arrival at the customer sites, and after unloading is complete. Personnel responsible for tracking shipment status from Ciateite were interviewed, the GPS system was demonstrated, and logs showing that shipment status was being recorded were reviewed and were found to be complete. Ciateite procedure for tracking of shipment status was reviewed during the audit and found to follow current practices.

The transport document shows the amount of cyanide delivered. This paperwork is used to document the chain of custody and is signed upon delivery of the product to the customer. The amount of cyanide delivered is carefully monitored by the driver and remotely through the Ciateite dispatch office.

Additionally, the containers are locked are tagged at the manufacturer's facilities and these tags are only removed at the mine. The auditor reviewed the trucks cyanide shipment bill of ladings matching the port scale reports, coinciding the weights always.

The shipping records indicate the number of packages and amount of material in transit. The Convoy Leader / drivers carries this documentation to the mine and upon arriving, the client review the seals and shipping papers to confirm quantities. The cyanide manufacturer dispatches all





shipments with Safety Data Sheet (SDS) that are appropriate for the type of sodium cyanide being shipped (solid). The auditor reviewed examples of shipping records covering the certification audit finding all in conformance.

## Principle 2 | INTERIM STORAGE

Design, construct and operate cyanide interim storage sites to prevent releases and exposures.

### Transport Practice 2.1

*Store cyanide in a manner that minimizes the potential for accidental releases.*

- The operation is
- in full compliance with
  - in substantial compliance with Transport Practice 2.1
  - not in compliance with

Interim storage activities in this transportation operation, as defined by ICMI, do not take place at Ciateite transport operation. This operation does not store any sodium cyanide along the route between the ports and the mines.



### Principle 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.*

in full compliance with

The operation is  in substantial compliance with Transport Practice 3.1

not in compliance with

Ciateite maintains the written emergency plan P-GR-002 Emergency and Contingency Plan for Cargo Road Transportation (ERP), to respond to potential releases and exposures to cyanide during transport. The ERP is appropriate for all transportation incidents. Ciateite personnel were interviewed, leadership understanding, and responsibilities was good. Ciateite personnel demonstrated an elevated level of commitment to ensuring that cyanide shipments are made in compliance with the Code requirements. The ERP includes contact information to notify local authorities, outside emergency response providers, and company operations and safety management.

The ERP is appropriate and designed for the specific circumstances. The Plan reflects specific issues that could arise during the transportation route (several different routes). The Plan identifies emergency situations as sodium cyanide release to road, land, surface water and robbery during transportation and state what actions are to be taken in the event of a cyanide incident during transit.

The document was found to be appropriate for the sodium cyanide transport operations. Emergency scenarios have been identified as result of the route assessment matrix and emergency response actions have been addressed. The Plan considers the physical and chemical form of the cyanide, with detailed explanation of the sodium cyanide characteristics and toxicity based on the safety data sheet (SDS). Emergency response procedures address actions to be taken in response to this type of sodium cyanide spills. The SDS for solid sodium cyanide is attached to the ERP to ensure that chemical-specific information is readily available at all times.



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The emergency scenarios, the general emergency response instruction, and the scenario-specific instructions consider the solid state of the cyanide. The Plan considers truck transport, the emergency response actions are appropriate for this type of product and method of transportation. The documents provide information regarding the packaging and transportation characteristics of the product, the container, iso tank and the transportation unit. All emergency scenarios developed are related to ground transportation: incidents without injuries, mechanicals problems, collision, rollover with and without spill, fire during transportation, fall of the load and collision with hurt persons.

The ERP considers all aspects of the transport infrastructure as condition of the road. The emergency response actions in these documents are appropriate for the roads and transport infrastructure of the country. They include the emergency scenarios developed from the routes assessment and also identify the areas where the different scenarios are more likely to take place.

The document considers the design of the transport vehicle with trucks and trailers, including a detailed description of the vehicle. The emergency response actions in the ERP are appropriate for these type of transport vehicles.

The emergency actions considers secure the area by measuring hydrocyanic gas (HCN) levels before approaching the victim in case of CN exposure. HCN gas monitors are set with two alarms, at 4.7 part per million (ppm) of HCN personnel must leave the work area and monitor gas levels until it drops and be able to continue their work; when the alarm is activated at 10 parts per million, they must evacuate the area and wait for specialized help to arrive with appropriate equipment.

The plan states to build earth dikes o confine the spill and thus prevent it from coming into contact with any watercourse. Indicates that should work on a buddy system during an emergency response with cyanide. Contaminated soil with CN should be collected after using sodium hypochlorite. Indicate the water/hypochlorite mixture ratio to have a 5% solution as defined in the plan.

in the event of a cyanide spill in body of water, Ciateite it will inform the authorities so that they can inform the downstream populations to refrain consuming that water

The Plan emergency scenario of cyanide intoxication states the victim should be given oxygen with a mask at a flow rate of 15 liters/minute (100% open valve). Never apply rescue breathing.

The Plan specifically considers response actions that may be needed for emergency situations during transportation. The Plan includes detailed response actions for each case, including spills in both current and open water bodies and for the other risks identified on the routes. The Plan considers a series of instructions covering the potential hazards that could occur during the loading, transportation and unloading of the cyanide cargo. It includes emergency response actions against



collision or rollover, spillage of dry cargo to water sources, on the road and landslides.

The Plan, also establishes the logical line of actions that the leader and convoy drivers must take when irregularities arise during transport of sodium cyanide, including civil commotion, adverse conditions, severe weather, traffic congestion and unplanned stops.

The role of outside responders and medical facilities in the emergency response procedures are clearly established. The police will provide support and safety to the transport units during the passage through cities and towns and will take control of traffic routes in case of an accident.

The role of emergency medical services is widely described throughout the emergency response plan for various emergency response scenarios. Calling for help by requesting ambulances to the nearest medical center is considered. For this, there is an emergency telephone list of hospitals and medical centers. The Plan also considers medical help through teleconsultation system since Ciateite has an occupational doctor. On the other hand, they also have a list of hospitals that have been trained in the use of the Cyanokit, which is transported in the convoy.

No interim storage is in the transport operation.

### Transport Practice 3.2

*Designate appropriate response personnel and commit necessary resources for emergency response.*

✓ in full compliance with

The operation is  in substantial compliance with Transport Practice 3.2

not in compliance with

Training on emergency response is given periodically to drivers, convoy leaders and supervisors. They are trained in appropriate emergency response in safe cyanide management (spill and intoxication), firefighting, first aids and hazardous materials. Training is provided by internal staff, external companies as workouts which are renewed annually, complying with the training plan and verifying compliance with specific skills. Also all the convoy participants receive emergency response training from the mining clients.

Drivers were interviewed and awareness of emergency procedures and documentation was confirmed. Training records were reviewed in emergency response, type "B" suits, and in the uses



of HCN gas detectors.

The personnel involved in the transportation operation are annually certified for HAZMAT through the Ministry of the Environment; they also take a 16-hour first aid course with the Red Cross every 2 years; also drivers take a defensive driving course that is repeated every 2 years. The auditor reviewed training records in transportation of hazardous materials, in the ERP, in the SDS and first aid for exposure to cyanide and, defensive driving, covering the certification period of 3 years. The Safety Area controls and monitors the training provided to drivers and those that are missing, through the Excel Worksheet Control of Qualified Resources in Clients.

The specific duties and responsibilities of the convoy personnel and emergency responders are clearly identified in the ERP. The Plan has detailed descriptions of the duties and responsibilities before, during and after an incident / accident or an emergency situation for the managers, transport coordinator, control room, the convoy leader and drivers, among others.

In the ERP, Appendix C the transporter lists the materials and equipment required for emergency response during transportation along the route including kits for first aids and spill response for cyanide emergencies. The list is also maintained separately as a checklist for inventorying the equipment. The auditor reviewed the transporter's documentation to verify compliance with this provision, finding it in compliance for the certification period.

Each truck has the required emergency response equipment por spills and personal protective equipment (PPE). In addition, the convoy escort vehicle has a complete emergency response equipment for first aids against cyanide exposure. The emergency equipment and materials are checked prior to each cyanide delivery; the amount of oxygen in the oxygen cylinders is verified during the inspection of the emergency response equipment . A checklist is used to verify that it is available and it is part in the operation files. The emergency equipment and materials are checked prior to each cyanide delivery. A checklist is used to verify that it is available and it is part in the operation files.

Among others, they list an HCN gas monitor, 1 or 1.5 m3 medicinal oxygen tank with reservoir mask, cardiopulmonary resuscitation mask -airway mask bag unit or AMBU – type, the cyanide antidotes amyl nitrite ampoules, sodium thiosulfate and sodium nitrite, 3M 6000 Series Full Face Masks, 3M 6200 or 7500 Half Face Mask, Tyvek suits, leather and impermeable gloves, PVC boots, safety goggles, isolating plastic tape rolls, HCN, shovels, sweeps, polyethylene bags, and empty containers

Ciateite' s escort personnel are trained to administer the inhalable cyanide antidote amyl nitrite ampoules; the injectable antidotes sodium thiosulfate and sodium nitrite are expected to be administered by external responders. During transportation, the antidotes are stored according to



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the manufacturers' recommendations.

The auditor reviewed completed pre trip checklists for emergency equipment and materials covering the certification period, finding this in compliance.

Among the control measures to adopt for the transportation of hazardous materials, the ERP addresses to perform inspections to the emergency response equipment before loading the truck by transport and operations personnel of Ciateite. Also, the emergency equipment is inspected on a regular basis when vehicles trucks are brought in for maintenance and inspections. A checklist is used to verify that it is available prior the convoy's departure and it is kept in the operation file. The availability and completeness of the material was confirmed during the audit.

### Transport Practice 3.3

*Develop procedures for internal and external emergency notification and reporting.*

- ✓ in full compliance with
- The operation is  in substantial compliance with Transport Practice 3.3
- not in compliance with

Ciateite ERP has a current emergency contact information list for necessary internal notification and external notifications in the event of a cyanide emergency during transport. The auditor reviewed the transporter notification procedure and contact information to verify compliance with this provision. Appendix A of the ERP has a complete emergency contact information detailing name & role, phone and email of Ciateite contacts and external responders as police, ambulance, hospitals, cyanide manufacturer, authorities, mining client contacts, regulatory agencies, and potentially affected communities, among others.

The ERP is reviewed once each year. During this activity, the phone numbers are checked for accuracy to ensure that internal and external emergency notification contacts are kept current. Records were available to show that this is done.

Ciateite has established in the ERP to notify the International Cyanide Management Institute in the event of a spill or cyanide poisoning exposure or a cyanide emergency that constitutes a significant cyanide incident, as defined in the Code Definitions and Acronyms document.



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The operation has not experienced any cyanide incidents during the full three-year audit cycle, so no such incidents were reported to ICMI.

### Transport Practice 3.4

*Develop procedures for remediation of releases that recognize the additional hazards of cyanide treatment chemicals.*

✓ in full compliance with

The operation is  in substantial compliance with Transport Practice 3.4

not in compliance with

The ERP describes activities such as recovery and neutralization of solutions or solids, decontamination of soils or other contaminated media and management and/or disposal of spill cleanup debris will be conducted. The Plan addresses the immediately actions to follow in case of spills, preventive measures to avoid, cleaning methods and how to treat waste. Ciateite personnel will perform spill cleanup and remediation in case of small cyanide spills.

The Plan states for a significant accident with cyanide spill, according to local regulations (Ministerial Agreement 061 R.O 316 Art 5 subsection p), Ciateite must call the Secretary of Risk Management (are identified in the Emergency Response Plan) which will be the competent authority uncharged to manage the emergency response assigning a specialized contractor to perform cleanup and remediation activities to ensure the land has been free of cyanide contamination. The plan also states Incinerox will be the contractor in charge of the final disposal of cyanide contaminated waste.

In accordance with the information provided by Ciateite' s Code Certification Líder, Ecuadorian regulations require, regardless of the magnitude of the spill, it is mandatory to notify the Secretary of Risk Management about of any spill of hazardous substances occurred, who will indicate where to dispose the waste product of the hazardous material.

Ciateite' s ERP prohibits the use of chemicals such as sodium hypochlorite, ferrous sulfate and hydrogen peroxide to treat cyanide that has been released into surface water. The ERP addresses that the use of chemical substances in any incident for the treatment of solid sodium cyanide spilled in surface waters is prohibited.



### Transport Practice 3.5

*Periodically evaluate response procedures and capabilities and revise them as needed.*

- The operation is
- in full compliance with
  - in substantial compliance with Transport Practice 3.5
  - not in compliance with

The ERP states in Section V to review the Plan at least annually or when needed. It is stated that any Plan update will be communicated to the clients for his knowledge and agreement. The updated Plan will be communicated and distributed among the drivers and all personnel involved in the cyanide transport operation during training sessions, in order to facilitate emergency response operations.

The auditor reviewed these provisions assessing the process and its implementation by reviewing the documentation of the various versions of the Plan and through interviews with staff. The plan reviewed was maintained as latest versions and under formal document control. Records were available to show that this is done.

The ERP establishes that mock emergency drills must be carried out every year. Also, that the practices will be scheduled in coordination with the client, to keep the personnel permanently prepared for an emergency.

On August 19, 2023, at the end of the external emergency response training, Ciateite conducted a cyanide spill and exposure drill en route, with 10 participants. Opportunities for improvement were reported, such as clearly defining the emergency zones: cold, warm and hot for the use of PPE, the need to use the full mask instead of half a face due to difficulty in use.

On December 8, 2022, they carried out an emergency drill for a cyanide spill with the assistance of the client, the mining company Lunin Gold.

On September 18, 2021, in the courtyard of Ciateite. They simulated cyanide spill with 20 participants, found opportunities for improvement, established corrective actions, and completed the process.

The auditor reviewed the drills reports finding to be effective. The drills have been evaluated to determine if response procedures are adequate, response equipment is appropriate, and personnel





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are professionally trained. Written documentation of these evaluations has been retained for the past years and used as a basis for whatever changes to procedures, equipment or training are necessary.

The Plan establishes the Plan will be evaluated on its performance after any event needing its activation and revise it as needed. Such reviews have not been conducted during this recertification period as no emergency occurred needing to activate the ERP.

