



**SUMMARY AUDIT REPORT**

# International Cyanide Management Code

*CSTT-AO Group Senegal – ICMC Transport Recertification Audit*

Submitted to:

**International Cyanide Management Institute**  
1400 I Street, NW – Suite 550  
WASHINGTON, DC 20005  
UNITED STATES OF AMERICA

**CSTT-AO Group Senegal**

Km 3,5 Boulevard du Centenaire de la Commune  
Dakar  
SENEGAL  
Email: [aissatou.kebe@csttaogroup.com](mailto:aissatou.kebe@csttaogroup.com)

Submitted by:

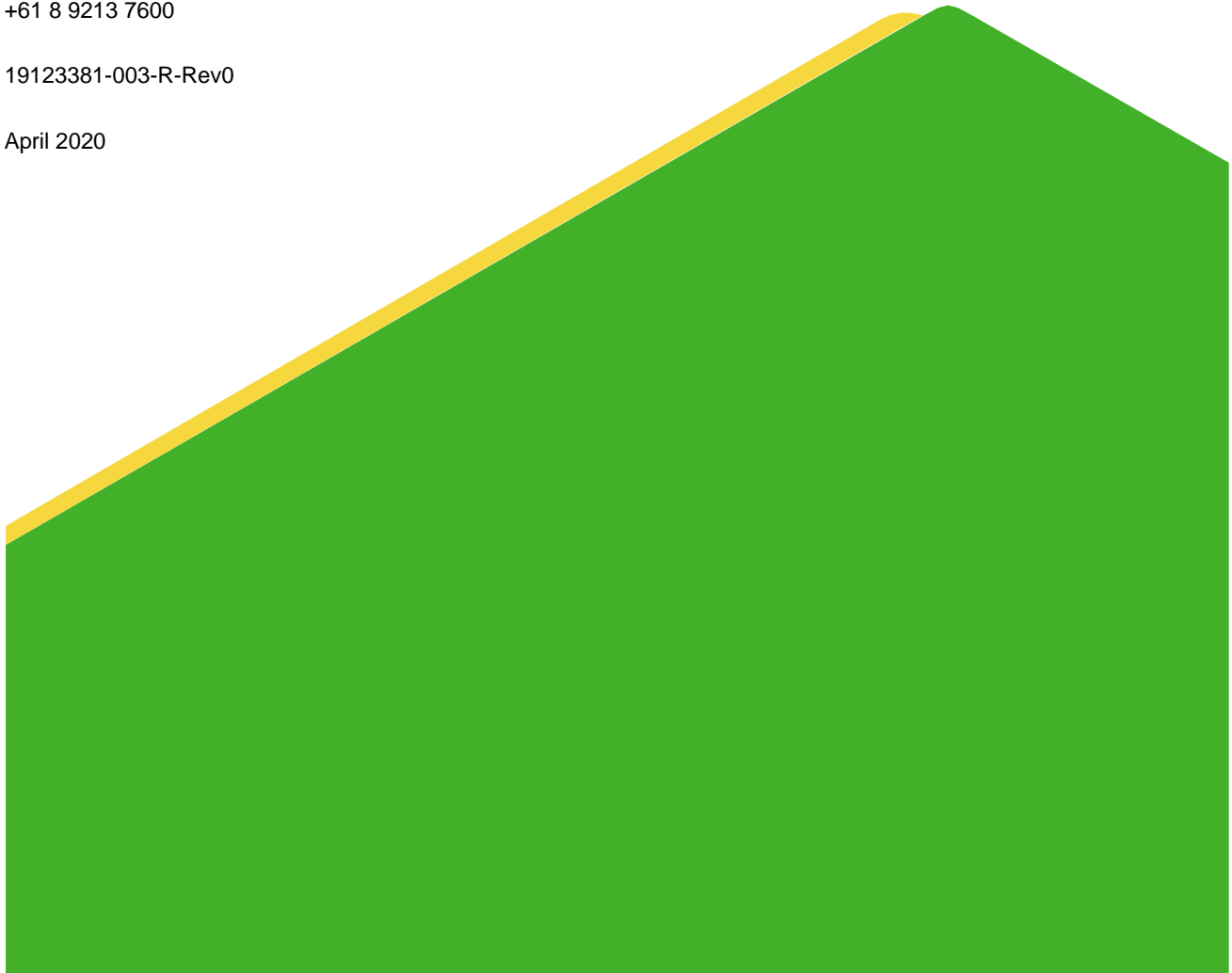
**Golder Associates Pty Ltd**

Level 3, 1 Havelock Street West Perth, Western Australia 6005 Australia

+61 8 9213 7600

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## 1.0 INTRODUCTION

### 1.1 Operational Information

<b>Name of Transportation Facility:</b>	CSTT-AO Group Senegal Transport Operations
<b>Name of Facility Owner:</b>	CSTT-AO Group
<b>Name of Facility Operator:</b>	CSTT-AO Group Senegal
<b>Name of Responsible Manager:</b>	Aissatou Kebe, Directeur Strategie et Developement
<b>Address:</b>	Km 3,5 Boulevard du Centenaire de la Commune
<b>State/Province:</b>	Dakar
<b>Country:</b>	Senegal
<b>Telephone:</b>	+221 33 849 49 39
<b>Email:</b>	aissatou.kebe@csttaogroup.com

## 2.0 CYANIDE TRANSPORTATION

### 2.1 CSTT-AO Group

CSTT-AO Group (CSTT) was founded in 1949 in Sénégal. It is focused on logistics, freight forwarding and transit services and has a vision of being a leading independent transport company within Africa. The company has procurement houses located in South Africa and Europe.

Approximately 80% of CSTT's business is focussed on the mining industry. CSTT transports cyanide to the mine sites in Sénégal and Mali.

The solid cyanide is packaged in intermediate bulk containers (IBCs), which are in turn packed into a freight (shipping) container to be transported by sea to the Port of Dakar, Sénégal. A maximum of 20 IBCs are packed into a freight container with a maximum gross weight of 28 tonnes.

Prior to the arrival at Dakar, CSTT ensures that the shipping documentation is in order and the goods are pre-cleared to allow prompt handling of the product through the Port. Upon arrival at the Port of Dakar, the offloading of all containers is performed by stevedoring companies. CSTT collects the containers and transports them to the designated area at its Transport depot where the containers are stored on the trailer in preparation for departure to the customer mine sites the following morning.

### 2.2 Transit Storage

Within the scope of this audit, there are no trans-shipping depots or interim storage sites, as defined in the Auditor Guidance. Storage in transit does occur at the Port of Dakar for four to five days, under the control of the port, while formalities such as customs clearance and carrier releases are performed.

Once formalities are complete, the cyanide containers are collected from the Port of Dakar by CSTT and taken to the Maintenance Depot where they are stored on the truck overnight in preparation for convoy departure early the following morning.

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### 2.3 Auditors Findings and Attestation

in full compliance with

**CSTT is:**  in substantial compliance with **The International Cyanide Management Code**

not in compliance with

No significant cyanide exposures or releases were noted to have occurred during CSTT recertification audit.

**Audit Company:** Golder Associates Pty Ltd  
**Audit Team Leader:** Mike Woods, Exemplar Global (113792)  
**Email:** mwoods@golder.com.au

### 2.4 Name and Signatures of Other Auditors

Name	Position	Signature	Date
Mike Woods	Lead Auditor and Transport Technical Specialist		7 April 2020


### 2.5 Dates of Audit

The ICMC Recertification Audit was conducted over two days on 28 and 29 October 2019 at CSTT facilities in Dakar, Senegal.

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 *Cyanide Transportation Verification Protocol for the International Cyanide Management Code* and using standard and accepted practices for health, safety and environmental audits.

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 Signature of Lead Auditor

7 April 2020  
 Date

## 3.0 CONSIGNOR SUMMARY

### 3.1 Principle 1 – Transport

Transport Cyanide in a manner that minimises the potential for accidents and releases.

#### 3.1.1 Transport Practice 1.1

Select cyanide transport routes to minimise the potential for accidents and releases.

CSTT is  in full compliance with **Transport Practice 1.1**  
 in substantial compliance with  
 not in compliance with

#### Summarise the basis for this Finding/Deficiencies Identified:

CSTT is in FULL COMPLIANCE with Transport Practice 1.1 requiring cyanide transport routes to be selected to minimise the potential for accidents and releases.

CSTT has developed and implemented a procedure to guide the selection of transport routes to minimise the potential for accidents and releases or the potential impacts of accidents and releases.

The procedure considers numerous hazards including population density, infrastructure construction and condition, road pitch and grade, and prevalence and proximity of water bodies and fog. These hazards are assessed and categorised into critical, major and minor risks to be considered when transporting dangerous goods.

CSTT has determined that the risks posed by the wet season are critical and suspend transportation during this time (June to late September). Following each wet season, route surveys are completed by the Security Manager to identify transportation risks and appropriate convoy stopping points. The route survey process is also used to contact stakeholders along the route (police, fire-fighters, hospitals) to explain the product and provide a MSDS, and convoy procedures detailing risks and management measures for all dangerous goods products. Consultation with stakeholders is used to update the contact lists.

Limited alternatives were available to consider for transportation within Sénégal and Mali. Sénégal has a designated east-west commercial route travelling from Dakar, Sénégal to the Mali border. This commercial route was selected as the most appropriate route to deliver cyanide to customers in Sénégal and Mali.

CSTT has developed a procedure to evaluate the risks of selected cyanide transport routes and take the measures necessary to manage these risks.

Hazards identified during the route survey are risk assessed using the risk assessment process described in the Route Assessment Procedure. Documented risk assessments covering each of the routes were available for review and include measure to control the identified risks.

CSTT has implemented a process and procedure to periodically re-evaluate routes used for cyanide deliveries.

Cyanide is delivered in convoy over an eight month campaign each year during the dry season. Route surveys are conducted at the beginning of each transport season and again in mid-way through (nominally January).

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In addition to an annual/biannual route survey, CSTT has a process for getting feedback on route conditions during each convoy. The convoy procedures require the Chef de Mission to develop a summary report that includes feedback on the route, incidents or issues, stakeholder contact and general comments.

CSTT has documented measures taken to address risks identified with the selected routes. The hazards are identified via the road survey reports.

The route/risk assessments are documented and information obtained through the route surveys, risk assessments and consultation, is used to update the Procédure de Transport du Cyanure.

CSTT seeks input from stakeholders and applicable governmental agencies as necessary in the selection of routes and development of risk management measures.

CSTT has identified the following stakeholders:

- Suppliers (Orica and Tongsuh)
- Government Ministries and Departments in Sénégal
  - Ministre De L'interieur (Police)
  - Direction De La Protection Civile
  - Brigade Des Sapeurs Pompiers (Local Fire Brigade)
  - Direction De La Surete Nationale (Department of Police Ministry)
  - Ministre De L'environnement
  - Hospitals
- Government Ministries and Departments in Mali
  - Department of Civil Protection (Boarder)
  - Pollution Control Agency
  - Mine sites in Sénégal and Mali

CSTT writes to the Ministry of Environment advising of each convey of cyanide, including the transport route and it attaches copies of the bill of lading. Each mine also writes to the Ministry of Environment in accordance with their own ICMC system. The Ministry of Environment authorises the convoy time and dates proposed and it advises the other relevant government agencies.

CSTT advise the fire brigade of the arrival time and date at each town. The fire brigade has limited resources so, CSTT convoys are largely self-sufficient in the event of emergencies. The majority of stakeholders acknowledge the consultation through official stamps on the documentation, with the exception of the Department of Health Services which does not formally acknowledge the consultation. Interviews confirmed that the consultation occurred.

Direct engagement of communities by CSTT does not occur for the following reasons:

- The community is not designated a role as part of the planned response to an emergency involving cyanide negating the need for community consultation on this issue.

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- Mine sites maintain community liaison programs including the transport of sodium cyanide to the mine site.

Convoys are used as a means of managing the risks of the road conditions and responding to emergencies. A maximum of eight containers are transported within each convoy which consists of

- 5 escort team members (including a trained medic (1) and fire fighters)
- 2 technicians (electrician and mechanic)
- 8 truck drivers

The eight trucks are led and tailed by two escort pickups. The escort vehicles contain accident response equipment.

CSTT has advised external responders, medical facilities and communities as necessary of their roles during an emergency response. The convoy is largely self-sufficient in the event of an emergency. In the event of an incident, primary emergency response is coordinated by CSTT escort personnel. The duties of primary responders include immediate notification to government authorities and medical facilities (as necessary).

Secondary response activities are conducted by CSTT, emergency services (as required) and the mine sites. CSTT has advised external responders and medical facilities of the cyanide transportation and contingency measures. The Mali and Sénégal public external responders do not have a direct role in incident management outside of their normal duties and CSTT has consequently limited their consultation.

CSTT does not subcontract any of the cyanide handling or transport.

### 3.1.2 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.**

CSTT is  in full compliance with **Transport Practice 1.2**  
 in substantial compliance with **Transport Practice 1.2**  
 not in compliance with

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


CSTT is in FULL COMPLIANCE with Transport Practice 1.2 requiring personnel operating cyanide handling and transport equipment can perform their jobs with minimum risk to communities and the environment.

CSTT only uses trained and competent operators to drive its trucks. CSTT has dedicated drivers that have appropriate training and vehicle licences to transport cyanide.

The training matrix is used by Human Resources to track driver licence currency for the 21 drivers approved for cyanide transportation. Mali and Sénégal are both members of La Communauté économique des États de l'Afrique de l'Ouest (CEDEAO) and drivers' licences issued in Sénégal are valid other CEDEAO member countries. Police also carry out checks of licenses along the route and drivers would be subject to fines or other penalties if not appropriately licensed

Sénégal and Mali do not have any dangerous goods legislation, despite this, dangerous goods training of all cyanide drivers is provided by CSTT.

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Personnel operating cyanide transport equipment have been trained to perform their jobs in a manner that minimises the potential for cyanide releases and exposures. The Directeur Stratégie et Développement advised that cyanide drivers are recruited from container drivers who are then trained in procedures for transport of dangerous goods.

In addition to the structured training, CSTT conduct pre-departure briefings that include refresher training on aspects of dangerous good transport and the hazards of the products being transported.

A review of training attendance records, training files and interviews with drivers confirmed that training is provided.

CSTT does not subcontract cyanide transport or handling.

### 3.1.3 Transport Practice 1.3

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

CSTT is  in full compliance with **Transport Practice 1.3**  
 in substantial compliance with **Transport Practice 1.3**  
 not in compliance with

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

CSTT is in FULL COMPLIANCE with Transport Practice 1.3 requiring that transport equipment is suitable for the cyanide shipment.

CSST only uses equipment designed and maintained to operate within the loads it will be handling when transporting cyanide. The company has prime movers and trailers dedicated to dangerous goods transportation. The prime movers have a 6 x 4 configuration and an appropriate vehicle power rating. The trailers carry single containers with an axle load that is within the CEDEAO limit for public roads (11.5 tonnes per axle).

No other load bearing equipment is used by CSTT for cyanide.

The company has a preventative maintenance programme based on truck engine hours (every 10,000 hrs) and convoy schedules with checks done before and after each convoy. The inspection includes visual observations on the prime mover for signs of stress. A mechanic and electrician also accompany the convoy.

In addition to the workshop maintenance, the Chef de Mission and drivers conduct an inspection of all prime movers and trailers prior to departure. These checks are conducted using self-guided assessment sheets.

Complementing the preventative maintenance program, is a maintenance request program where faults can be logged. The driver is interviewed after each trip.

Logbooks are maintained by CSTT detailing the maintenance history of each prime mover and trailer.

Procedures are in place to verify the adequacy of the equipment for the load it must bear. As noted previously, equipment consists of prime movers and trailers that were purchased to a design specification appropriate for the cyanide transport task.

CSTT has implemented a preventative maintenance program, vehicle inspections and reactive maintenance procedures to ensure the load bearing capacity and adequacy of the vehicles are maintained.

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Procedures are in place to prevent overloading of the transport vehicle being used for handling cyanide. CSTT has prime movers dedicated to dangerous goods transportation. The prime movers have a 6 x 4 configuration and an appropriate vehicle power rating. The trailers carry single containers with an axle load that is within the CEDEAO limit for public roads (11.5 tonnes per axle).

Mission Reports, completed during each convoy, record the number of the truck and the containers carried by the truck.

CSTT does not subcontract cyanide transport or handling.

### 3.1.4 Transport Practice 1.4

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

CSTT is  in full compliance with **Transport Practice 1.4**  
 in substantial compliance with **Transport Practice 1.4**  
 not in compliance with

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

CSTT is in FULL COMPLIANCE with Transport Practice 1.4 requiring the operation develop and implement a safety programme for transport of cyanide.

CSTT has procedures to ensure that the cyanide is transported in a manner that maintains the integrity of the producer's packaging.

When containers are loaded on to the trucks at the port, the Chef de Mission checks the container for damage, monitors for HCN gas and notes the seal number on the convoy paperwork if it differs from the Bill of Lading. If it is noted that the container is damaged it is noted on the Way Bill and then checked by the Port staff.

Customs officials in Sénégal and Mali also check the presence of the seals and check the seal numbers. A record of the inspections is noted on the Mission Reports.

All containers are held in place on the vehicles using twist locks and speed limits are enforced throughout the journey. Visual inspections of the containers are conducted at the conclusion of each break to confirm they are intact prior to restarting the journey.

Placards and signage used to identify the shipment as cyanide meet local and international standards. Diamonds placed at front and rear of the vehicle identify load as cyanide and the containers also have labelling that identifies the contents of the container. An inspection of the vehicles and interviews with drivers confirmed that placarding is used.

CSTT has implemented a safety program for cyanide transport that includes (where appropriate or applicable) the following:

a) *Vehicle inspections prior to each departure/shipment.*

Pre-departure inspections are required to be completed prior to departure. The checks are included within the mission reports. Undocumented inspections of vehicles and loads are conducted approximately every 2 hours when driving.

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b) *A preventative maintenance program.*

The company has a preventative maintenance programme based on truck engine hours (every 10,000 hrs) and convoy schedules with checks done before and after each convoy.

In addition to the workshop maintenance, the Chef de Mission and drivers conduct an inspection of all prime movers and trailers prior to departure. These checks are conducted using self-guided assessment sheets.

Complementing the preventative maintenance program, is a maintenance request program where faults can be logged. The driver is interviewed after each trip.

Logbooks are maintained by CSTT detailing the maintenance history of each prime mover and trailer.

c) *Limitations on operator or drivers' hours.*

During each convoy, drivers have a break every 2 hours at established stop points identified during the route assessment process. The vehicles stop every night as no night driving is permitted. The prime mover cabins have beds and air-conditioning. Drivers have one day rest following the conclusion of each convoy.

d) *Procedures to prevent loads from shifting.*

At the Port of Dakar, containers are secured using twist locks, which are designed and constructed to international transport standards.

e) *Procedures by which transportation can be modified or suspended if conditions such as severe weather or civil unrest are encountered.*

CSTT suspends operations during inclement weather. Suitable stopping locations have been identified as part of the route survey process. In the event that the convoy needs to be stopped, it is parked in a preapproved location and the mine is informed.

The decision to halt the transportation mid journey is made by the Chef de Mission in consultation with CSTT Management.

f) *A drug abuse prevention program.*

CSTT has a Drug and Alcohol Policy and all employees are subject to random testing. Approximately 15 employees are tested annually. The testing clinic is located approximately 100 m from the CSTT depot.

It was advised that records are retained by the Human Resources Department.

g) *Retention of records documenting that the above activities have been conducted.*

Records are maintained and were inspected (with the exception of medical records) for relevant parts of this element.

CSTT does not subcontract cyanide transport or handling.

### 3.1.5 Transport Practice 1.5

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

CSTT is  in full compliance with **Transport Practice 1.5**  
 in substantial compliance with  
 not in compliance with

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

Transport Practice 1.5 requiring the operation follow international standards for transportation of cyanide by sea and air is NOT APPLICABLE to CSTT.

CSTT does not and does not intend to transport consignments of cyanide by sea within the scope of this audit.

CSTT does not and does not intend to transport consignments of cyanide by air within the scope of this audit.

### 3.1.6 Transport Practice 1.6

Track cyanide shipments to prevent losses during transport.

CSTT is  in full compliance with **Transport Practice 1.6**  
 in substantial compliance with  
 not in compliance with

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

CSTT is in FULL COMPLIANCE with Transport Practice 1.6 requiring the operation track cyanide shipments to prevent losses during transport.

CSTT vehicles have means to communicate with between vehicles, with the Depot, mine, cyanide producer and emergency responders.

- The following communication equipment is used by the convoy:
- Trucks – Two way radio, cell phone, GPS tracking system
- Convoy escort vehicle – Two way radio, satellite phone and cell phone

The two way radios are used for internal convoy communication. The Chef de Mission uses the cell phone or satellite phone to communicate (SMS or voice) with the Depot every day. Once the report has been received, the CSTT Logistics Officer sends an email update to the mine.

All movements of trucks is tracked via a GPS system which is monitored by CSTT.

Communication with the supplier is via email or telephone from CSTT Directeur Stratégie et Développement, but communications are limited to emergency events only, not routine transportation updates.

Communication equipment is periodically tested to ensure it functions properly. The GPS tracking system continuously transmits position and other data from each truck throughout the trip. The testing is conducted as part of the pre departure inspection process and through continual use.

The pre departure inspection forms are included within the Mission Reports.

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CSTT has identified communication blackout areas along transport routes as part of the route assessment process. Cell phone communication is intermittent along the transport routes outside of Dakar and regional centres in Sénégal and Mali.

Due to the inconsistent coverage of cell phone signals, two way radios, satellite phones and GPS tracking are used as the communication methods. Rest stops are not located within communication blackout areas.

The GPS tracking system continuously transmits position and other data from each truck throughout the trip. CSTT has systems to track the progress of cyanide shipments. The GPS tracking system continuously transmits position and other data from each truck throughout the trip. The Chef de Mission uses the cell phone or satellite phone to communicate (SMS or voice) with the Depot every day. Once the report has been received, the CSTT Logistics Officer sends an email update to the mine.

All movements of trucks is tracked via a GPS system which is monitored by CSTT.

CSTT implements chain of custody procedures to prevent loss of cyanide during shipment. As noted previously, the Chef de Mission conducts a visual inspection of the containers once they are loaded onto the trucks at the Port to ensure they are intact and seal present prior to departure.

Customs officials in Sénégal and Mali check the presence of the seals and check the seal numbers.

The Chef de Mission conducts a visual inspection of the containers at the conclusion of each break to confirm they are intact prior to restarting the journey. Delivery documentation (Way Bill) is also carried on each truck.

Shipping records indicating the amount of cyanide in transit and Safety Data Sheets are available during transport. A review of delivery documentation together with pre-departure security checks confirmed that the amount of cyanide on each vehicle is recorded.

CSTT does not subcontract cyanide transport or handling.

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### 3.2 Principle 2 – Interim Storage

Design, construct and operate cyanide trans-shipping depots and interim storage sites to prevent release and exposures.

#### 3.2.1 Transport Practice 2.1

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

in full compliance with

CSTT is

in substantial compliance with

Transport Practice 2.1

not in compliance with

#### Summarise the basis for this Finding/Deficiencies Identified:

Transport Practice 2.1 is NOT APPLICABLE to CSTT that requires transporters design, construct and operate cyanide trans-shipping depots and interim storage sites to prevent release and exposures.

Within the scope of this audit, there are no trans-shipping depots or interim storage sites, as defined in the audit protocol.

Storage in transit may occur at the event that transport is delayed. In this event, containers will not be removed from the trailers and the vehicles will only be parked for a maximum of 24 hours.

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### 3.3 Principle 3 – Emergency Response

Protect communities and the environment through the development of emergency response strategies and capabilities.

#### 3.3.1 Transport Practice 3.1

Prepare detailed Emergency Response Plans for potential cyanide releases.

CSTT is  in full compliance with **Transport Practice 3.1**  
 in substantial compliance with  
 not in compliance with

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

CSTT is in FULL COMPLIANCE with Transport Practice 3.1 requiring the operation prepare detailed Emergency Response Plans for potential cyanide releases.

CSTT has developed an Intervention D’urgence and supporting emergency response procedures to address potential cyanide transportation emergencies within Sénégal and Mali. The development of the Intervention D’urgence was based on the route surveys and risk assessment.

The emergency response procedures are appropriate for the selected transportation routes. CSTT does not undertake any interim storage activities.

The route evaluation process, hazard/risk assessment process, and operational experience was used by CSTT to identify likely emergency scenarios within the emergency response plan (ERP). The Emergency Response Plan details the required actions under each of the following scenarios:

- Vehicle rollover (no release)
- Vehicle rollover and cyanide release.
- Victim decontamination
- Vehicle rollover, cyanide release and cyanide exposure

The emergency response procedures consider the physical and chemical form of cyanide. The emergency response procedures contain response information for scenarios relevant to solid sodium cyanide and its packaging in IBCs within 20 foot sea containers. Material Safety Data Sheets that detail the chemical form of cyanide are readily available.

The ERP does consider the method of transport. Emergency response procedures are based on the road transportation of solid cyanide in IBCs within a shipping container with a single container per vehicle and vehicles in a convoy. The emergency response procedures consider all aspects of the transport infrastructure as they were developed using the route evaluation process and hazard/risk assessment process.

The emergency response procedures consider the design of the transport vehicles. The plans are specifically drafted around the transport of solid cyanide in IBCs packed within 20 foot sea containers. Single containers are transported on flat top trailers pulled by 6 x 4 trucks.

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The emergency response procedures include descriptions of response actions, as appropriate for the anticipated emergency situation. The Intervention D'urgence addresses the following scenarios:

- Vehicle rollover (no release)
- Vehicle rollover and cyanide release.
- Victim decontamination
- Vehicle rollover, cyanide release and cyanide exposure

The roles and responsibilities for CSST personnel and each of the scenarios are detailed in the Définition des rôles et responsabilités en cas d'accident pendant le convoyage de produits dangereux procedure. This procedure describes the two emergency management teams:

- On-site emergency response team (Escort Team). This team is responsible for the initial incident response (notification, rescue, first aid, containment and cleanup).
- Incident Management Team. This team is responsible for the coordination, communication and management of the incident and it supports the on-site emergency team.

The procedure describes the roles and responsibilities for the following positions within the two teams:

- Chef de Mission
- Medic
- Emergency responder
- Escort vehicle drivers
- Truck drivers
- Incident Management Team.

Outside responders and medical facilities are not allocated roles within the CSTT emergency documentation outside of their normal duties. In the event of an incident, primary emergency response is coordinated by CSTT escort personnel. The duties of primary responders include immediate notification to government authorities and medical facilities (as necessary).

Secondary response activities are conducted by CSTT, emergency services (as required) and the mine sites. CSTT has advised external responders and medical facilities of the cyanide transportation and contingency measures. The Mali and Sénégal public external responders do not have a direct role in incident management outside of their normal duties and CSTT has consequently limited their consultation.

The community is not designated a role as part of the planned response to an emergency.

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### 3.3.2 Transport Practice 3.2

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

CSTT is  in full compliance with **Transport Practice 3.2**  
 in substantial compliance with **Transport Practice 3.2**  
 not in compliance with

#### Summarise the basis for this Finding/Deficiencies Identified:

CSTT is in FULL COMPLIANCE with Transport Practice 3.2 requiring they designate appropriate response personnel and commit necessary resources for emergency response.

CSTT provides emergency response training of appropriate personnel.

The training requirements are specified within the Manuel de Transport de Matières Dangereuses and emergency response procedures:

- Fatigue management (every 2 years)
- First Aid (every 3 years)
- Product risk and cyanide awareness (every year)
- Emergency response – including mock drill (every year)

These courses also include training in:

- Symptoms of cyanide poisoning
- Correct use of individual protective equipment
- Decontamination

During the site inspection of the transport depot, discussions with drivers and the escort team confirmed that they have completed the training.

Descriptions of the specific emergency response duties and responsibilities are detailed within the Emergency Response procedures:

As noted previously, the roles and responsibilities (including duties) for CSST personnel are detailed in the Définition des rôles et responsabilités en cas d'accident pendant le convoyage de produits dangereux procedure. Interviews with the Drivers and Escort Team confirmed that they knew their roles in the event of an incident.

CSTT maintains a list of all of the emergency response equipment that should be available during the transport route.

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The equipment is inspected against the equipment list to ensure it is present and checked to ensure it is in good order. The checklist is completed as part of the preparations for each convoy of cyanide deliveries. The Mission reports contain copies of the completed checklists, including emergency response equipment checklists. An inspection of the equipment found it to be available and in serviceable condition.

CSTT has the necessary emergency response and health and safety equipment, including personal protective equipment during transport. During the site inspection, the equipment was compared to the emergency response equipment checklists. The use-by date on medical equipment was also checked. The mission reports included completed checklists for the specified emergency equipment.

CSTT provides training for all drivers and the Escort Teams.

The training includes:

- Fatigue management (every 2 years)
- First Aid (every 3 years)
- Product risk and cyanide awareness (every year)
- Emergency response – including mock drill (every year).

During the site inspection of the transport depot, discussions with drivers and the escort team confirmed that they have completed the training.

CSTT maintains a list of all of the emergency response equipment that should be available during the transport route. The checklist is completed as part of the preparations for each convoy of cyanide deliveries. The checks include the presence and operability of the equipment. The Mission reports contain copies of the completed checklists, including emergency response equipment checklists. A review of completed checklists and interviews with drivers confirmed that procedures are in place and being followed.

CSTT does not subcontract cyanide handling or transport.

### 3.3.3 Transport Practice 3.3

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

CSTT is  in full compliance with **Transport Practice 3.3**  
 in substantial compliance with **Transport Practice 3.3**  
 not in compliance with

#### Summarise the basis for this Finding/Deficiencies Identified:

CSTT is in FULL COMPLIANCE with Transport Practice 3.3 requiring that they develop procedures for internal and external emergency notification and reporting.

There are procedures and current contact information for notifying the shipper, the receiver/consignee, regulatory agencies, outside response providers, medical facilities and potentially affected communities of an emergency.

CSTT maintains a procedures and current contact information for notifying the shipper, the receiver/consignee, outside response providers, and medical facilities of an emergency.

The communication process is documented in *Procedure de Communication du Convoi* procedure and the numbers are detailed on the Contact List. The route assessment process is used by CSTT to update all contact numbers annually. These are documented on the Contact List. The procedure also includes details on notifying regulatory agencies in the event of an emergency.

Systems are in place to ensure that internal and external emergency notification and reporting procedures are kept current. The emergency response documentation and route assessment processes contain procedures to ensure that internal and external emergency notification and reporting procedures are kept current. The route assessment process is used by CSTT to update all contact numbers annually. These are documented on the Contact List.

### 3.3.4 Transport Practice 3.4

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

CSTT is  in full compliance with **Transport Practice 3.4**  
 in substantial compliance with  
 not in compliance with

#### Summarise the basis for this Finding/Deficiencies Identified:

CSTT is in FULL COMPLIANCE with Transport Practice 3.4 requiring that they develop procedures for remediation of releases that recognise the additional hazards of cyanide treatment.

CSTT has procedures for remediation, such as recovery or neutralisation of solutions or solids, decontamination of soils or other contaminated media and management and/or disposal of spill clean-up debris.

The procedures describe the decontamination and remediation processes for both minor and major spills. The procedure outlines the following actions:

- Testing for cyanide
- Assessment of the spill
- Excavation and collection of cyanide briquettes and impacted soil
- Application of reagents for neuralisation
- Completion of second test for cyanide

Interview of a Chef de Mission confirmed knowledge of clean-up procedures.

CSTT emergency response documentation explicitly prohibits the use of chemicals such as sodium hypochlorite, ferrous sulfate and hydrogen peroxide to treat cyanide that has been released into surface water.

CSTT-AO

Name of Facility



Signature of Lead Auditor

7 April 2020

Date

### 3.3.5 Transport Practice 3.5

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

CSTT is  in full compliance with **Transport Practice 3.5**  
 in substantial compliance with  
 not in compliance with

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

CSTT is in FULL COMPLIANCE with Transport Practice 3.5 requiring the operation periodically evaluate response procedures and capabilities and revise them as needed.

There are provisions for periodically reviewing and evaluating CSTTs emergency procedures adequacy and they are being implemented.

The emergency response procedures are reviewed on a semi-annual base or following emergency drill. The Intervention D'urgence has been reviewed during the recertification period in conformance with the procedural requirements.

The procedures were reviewed in 2019 and mock drills have been undertaken as planned over the three-year period. The mock drill process includes a debrief process and review of what went well and opportunities to improve response.

There are provisions for periodically conducting mock emergency drills and they are they implemented. The operation does conduct emergency response drills annually for cyanide related scenarios. A review of mock drill reports and interviews confirmed that mock drills have been completed in accordance with commitments.

There is a procedure to evaluate the emergency performance after its implementation and revise if necessary. The procedure will be updated after an incident or if there is a change in process or equipment. Following the annual mock drill a review of the ERP is undertaken and updated as required.

No incidents involving cyanide transport have occurred during the audit period.

## 4.0 IMPORTANT INFORMATION

Your attention is drawn to the document titled – “Important Information Relating to this Report”, which is included in Appendix A of this report. The statements presented in that document are intended to inform a reader of the report about its proper use. There are important limitations as to who can use the report and how it can be used. It is important that a reader of the report understands and has realistic expectations about those matters. The Important Information document does not alter the obligations Golder Associates has under the contract between it and its client.

CSTT-AO

Name of Facility



Signature of Lead Auditor

7 April 2020

Date

## Signature Page

### **Golder Associates Pty Ltd**



Mike Woods  
*ICMC Lead Auditor and ICMC Transportation Expert*

MCW/EWC/hn

A.B.N. 64 006 107 857

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**APPENDIX A**

# Important Information

The document ("Report") to which this page is attached and of which this page forms a part has been issued by Golder Associates Pty Ltd ("Golder") subject to the important limitations and other qualifications set out below.

This Report constitutes or is part of services ("Services") provided by Golder to its client ("Client") under and subject to a contract between Golder and its Client ("Contract"). The contents of this page are not intended to and do not alter Golder's obligations (including any limits on those obligations) to its Client under the Contract.

This Report is provided for use solely by Golder's Client and persons acting on the Client's behalf, such as its professional advisers. Golder is responsible only to its Client for this Report. Golder has no responsibility to any other person who relies or makes decisions based upon this Report or who makes any other use of this Report. Golder accepts no responsibility for any loss or damage suffered by any person other than its Client as a result of any reliance upon any part of this Report, decisions made based upon this Report or any other use of it.

This Report has been prepared in the context of the circumstances and purposes referred to in, or derived from, the Contract and Golder accepts no responsibility for use of the Report, in whole or in part, in any other context or circumstance or for any other purpose.

The scope of Golder's Services and the period of time they relate to are determined by the Contract and are subject to restrictions and limitations set out in the Contract. If a service or other work is not expressly referred to in this Report, do not assume that it has been provided or performed. If a matter is not addressed in this Report, do not assume that any determination has been made by Golder in regards to it.

At any location relevant to the Services conditions may exist which were not detected by Golder, in particular due to the specific scope of the investigation Golder has been engaged to undertake. Conditions can only be verified at the exact location of any tests undertaken. Variations in conditions may occur between tested locations and there may be conditions which have not been revealed by the investigation and which have not therefore been taken into account in this Report.

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Having regard to the matters referred to in the previous paragraphs on this page in particular, carrying out the Services has allowed Golder to form no more than an opinion as to the actual conditions at any relevant location. That opinion is necessarily constrained by the extent of the information collected by Golder or otherwise made available to Golder. Further, the passage of time may affect the accuracy, applicability or usefulness of the opinions, assessments or other information in this Report. This Report is based upon the information and other circumstances that existed and were known to Golder when the Services were performed and this Report was prepared. Golder has not considered the effect of any possible future developments including physical changes to any relevant location or changes to any laws or regulations relevant to such location.

Where permitted by the Contract, Golder may have retained subconsultants affiliated with Golder to provide some or all of the Services. However, it is Golder which remains solely responsible for the Services and there is no legal recourse against any of Golder's affiliated companies or the employees, officers or directors of any of them.

By date, or revision, the Report supersedes any prior report or other document issued by Golder dealing with any matter that is addressed in the Report.

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