

**SUMMARY AUDIT REPORT**  
**JUNE 2019**  
**INTERNATIONAL CYANIDE MANAGEMENT INSTITUTE**  
**Recertification Audit**



Prepared by

**WARDELL ARMSTRONG INTERNATIONAL**

Sir Henry Doulton House, Forge Lane, Etruria  
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## SUMMARY AUDIT REPORT

Name of Cyanide Transportation Facility: Green Supply and Logistics (GSL)

Name of Facility Owner: Don Harrist

Name of Facility Operator: Green Supply and Logistics

Name of Responsible Manager: Don Harrist

Address: Green Supply and Logistics, Chihuahua SA de CV

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Green Supply &  
Logistics



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June 2019

# SUMMARY AUDIT REPORT

## GREEN SUPPLY AND LOGISTICS

### GLOSSARY

Cedi Galeon	Centro de Distribution Galeon S.A. de C.V
Enlace	Enlace Logistico Industrial S.A. de C.V
ERP	Emergency Response Plan
ER	Emergency Response
GSL	Green Supply and Logistics S.A. D C.V
ICMI	International Cyanide Management Institute
IMO	International Maritime Organisation
IRCA	International Register of Certificated Auditors
ISF	International Storage Facility
SETIQ	Systema de Emergencia para la Transportacion de la Industria Quimica (Emergency Transportation System for the Chemical Industry)
MCD	Mexican Civil Defence Authority
MSDS	Material Safety Data Sheets
WAI	Wardell Armstrong International

# SUMMARY AUDIT REPORT

## GREEN SUPPLY AND LOGISTICS

### INTRODUCTION AND SUPPLY CHAIN STRUCTURE:

Wardell Armstrong International (WAI) was commissioned by Green Supply and Logistics S.A de C.V (GSL) to undertake a re-certification audit of their 'Mexican Supply Chain' in accordance with the International Cyanide Management Institute's (ICMI) Code (the Code). This was carried out by Christine Blackmore (IRCA registration No. 1199173) - Accredited Lead Cyanide Auditor. Several documents were reviewed prior to the site visit. The site visit was undertaken in November 2018.

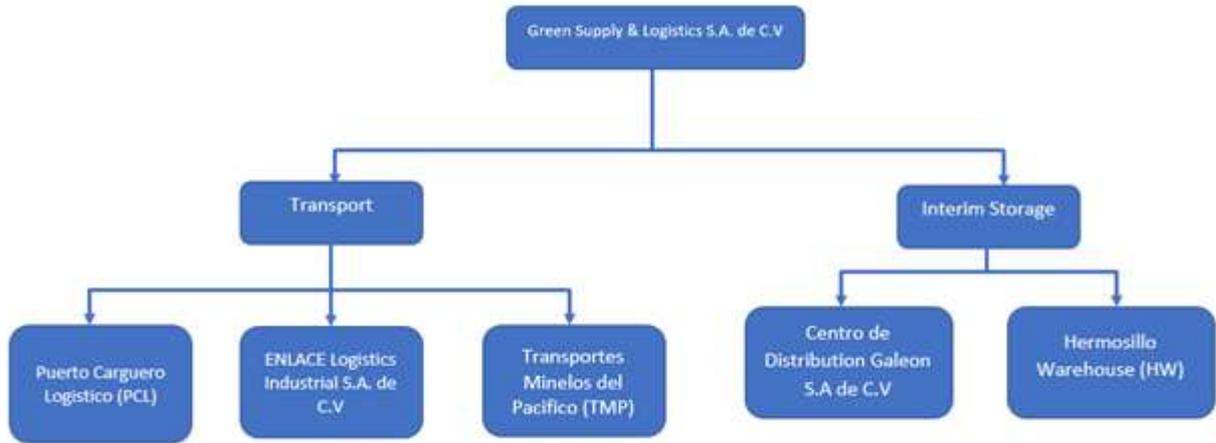


Figure 1: Green Supply & Logistics' 'Mexico Supply Chain'

Figure 1 above identifies GSL supply chain to be audited, amendments to the chain have been made since GSL audit in February 2016. All members including GSL have been audited accordingly.

Three supply chain members GSL, ENLACE Logistics Industrial SA de CV (ENLACE) and Centro Distribution Galleon SA de CV (Cedi) are re-certification audits. Hermosillo Warehouse (Hermosillo), Puerto Carguero Logistics (PCL) and Transportation Minelos del Pacifico SA de CV (TMP) are new additions and replace former members who have now left GSL supply chain.

It is GSL's intention to continue to be 'Cyanide Code' compliant for their supply chain as a whole, working with the sub-contractors named above.

GSL purchase their cyanide from two ICMI accredited producers Hebei Chengxin Co Ltd, China and TAE Kwang Industrial Co. Ltd, Korea. The cyanide is shipped to Mexico and unloaded at the ports of Manzanillo and Guaymas. Both ports are licensed for the importation of Dangerous Goods (DGs). GSL is a broker trading in cyanide and services several mines in Mexico, therefore the use of two ports and distribution centres are important.

Guaymas Port, Senora, Mexico - cyanide is collected by PCL and taken to Hermosillo (interim storage), then onward transport again by PCL when required.

Green Supply &  
Logistics

June 2019

# SUMMARY AUDIT REPORT

## GREEN SUPPLY AND LOGISTICS

Manzanillo Port, Colima, Mexico - cyanide is collected by Cedi's own shunting vehicles, stored at Cedi (interim storage), onward transport is provided by ENLACE and TMP when required.

The Audit has been conducted using the following audit sections for both re-certification and new additional audits:

### GSL

- Section 1 Production (from Operational Mine Audit)
- Transportation Audit
  - 1) Transport;
  - 2) Interim Storage; and
  - 3) Emergency Response.

### Cedi and Hermosillo

- Transportation Audit
  - 1) Interim Storage; and
  - 3) Emergency Response.

### ENLACE, PCL and TMP

- Transportation Audit
  - 1) Transport; and
  - 3) Emergency Response

All audits new and re-certification have been undertaken in accordance with the ICMI Code (the Code).

The summary audits are provided in the following appendices A-F.

**SUMMARY AUDIT REPORT**  
**GREEN SUPPLY AND LOGISTICS**

Name of Cyanide Transportation Facility: Green Supply and Logistics  
Name of Facility Owner: Don Harrist  
Name of Facility Operator: Green Supply and Logistics (GSL)  
Name of Responsible Manager: Don Harrist  
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Email: donh@cianuroenmexico.com

**SUMMARY AUDIT REPORT  
GREEN SUPPLY AND LOGISTICS**

*Auditor's Finding*

This operation is

- in full compliance
- in substantial compliance
- not in compliance

with the International Cyanide Management Code.

Include one of the following statements for Recertification Audit Reports:

This operation has maintained full compliance with the International Cyanide Management Code throughout the previous three-year audit cycle.

Audit Company: Wardell Armstrong International Ltd

Audit Team Leader: Christine Blackmore

E-mail: [cblackmore@wardell-armstrong.com](mailto:cblackmore@wardell-armstrong.com)

Date(s) of Audit: 22 January 2019

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.

**SUMMARY AUDIT REPORT**  
**GREEN SUPPLY AND LOGISTICS**

**1. PRODUCTION:** *Encourage responsible cyanide manufacturing by purchasing from manufacturers who operate in a safe and environmentally protective manner.*

Standard of Practice 1.1: *Purchase cyanide from manufacturers employing appropriate practices and procedures to limit exposure of their workforce to cyanide, and to prevent releases of cyanide to the environment.*

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

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

Cyanide procurement is the responsibility of GSL. GSL procedures state that only ICMI certified manufacturers will be used.

Interim storage and transport sub-contractors are used but not permitted to purchase cyanide for use as part of GSL's 'Mexico Supply Chain'.

**2. 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.*

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

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

Each transport sub-contractor use the Mexican "route planner" for the transportation of DGs including cyanide. By law the transportation needs to comply with this route and no deviations are allowed unless specifically authorised by the Mexican authorities.

All GSL sub-contractors have their own internal route feedback procedures, key points are noted and passed on to GSL for action/information.

All vehicles carrying cyanide are fitted with GPS tracking systems. These are electronically monitored throughout the journey by the transporter and can also be accessed by GSL.

**SUMMARY AUDIT REPORT**  
**GREEN SUPPLY AND LOGISTICS**

GSL have prepared an emergency response plan, the plan describes the procedures for contacting the MCD. The MCD take control and manage all incidents/accidents and it is their responsibility to advise all the necessary external responders, medical facilities and communities of their roles should the need arise.

GSL reviewed the Emergency Response Plans for transporter/interim storage facility prior to their appointment as part of the 'Mexico Supply Chain'. This audit has taken into consideration 2 new transporter and 1 new warehouse.

2 transporters have been deleted from GSL supply chain.

All procedures were found to be satisfactory and comply with GSL overarching ERP.

For more detail see individual sub-contractor audits.

*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.*

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

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

Training is the overarching responsibility of GSL. GSL have demonstrated that they have a fully qualified trainer who has undertaken training sessions with each transporter and interim storage facility. All training procedures were reviewed by GSL prior to the appointment of sub-contractors to the 'Mexico Supply Chain'.

**SUMMARY AUDIT REPORT**  
**GREEN SUPPLY AND LOGISTICS**

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

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

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

GSL has overarching responsibility with regard to the condition and suitability of transport vehicles.

Each transporter was reviewed for compliance against GSL’s own policies and the ICMC. The auditor conducted spot checks of axle weights, vehicle documentation, vehicle maintenance and load capacity during the site visit.

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

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

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

GSL reviewed all procedures relating vehicle safety handling prior to the appointment of contractors to the ‘Mexico Supply Chain’. GSL enforces compliance with regular spot checks/site walkover. The auditor conducted spot checks during the site visit. All sub-contractors were found to be compliance with both GSL’s internal procedures and the ICMC.

Transport Practice 1.5:    *Follow international standards for transportation of cyanide by sea and air.*

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

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

Cyanide is transported by sea from the manufacturers in China and Korea to the Ports of Manzanillo and Guaymas are in full compliance with the International Maritime Organisation’s Dangerous Goods Code.

**SUMMARY AUDIT REPORT**  
**GREEN SUPPLY AND LOGISTICS**

Transport from Korea and China to Mexico does not form part of this ‘Mexico Supply Chain’ audit. Neither GSL nor its transport sub-contractors transport cyanide by sea.

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

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

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

Communication between and tracking of shipments within the ‘Mexico Supply Chain’ is the responsibility of GSL.

GSL track the shipments from the time they leave the ISF to the reception and acceptance at the mine site. Consignment notes are issued and acceptance notes returned via email after acceptance at the mine. GPS tracker systems are on all vehicles and all drivers have mobile telephone communications. Individual transport sub-contractors also track cyanide shipments.

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

Transport Practice 2.1: *Store cyanide in a manner that minimizes the potential for accidental releases.*

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

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

All interim storage facilities were reviewed for compliance against GSL’s own internal procedures and the ICMC prior to their appointment to the ‘Mexico Supply Chain’.

**SUMMARY AUDIT REPORT**  
**GREEN SUPPLY AND LOGISTICS**

**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.*

The operation is  in full compliance with  
 in substantial compliance with Transport Practice 3.1  
 not in compliance with

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

GSL have prepared an Emergency Response Plan (ERP). The ERP is appropriate for the transportation routes and the interim storage facilities. The plan only discusses transportation by road and interim storage of solid cyanide, the plan takes into consideration road conditions and abnormal working for example landslides, rock falls and unexpected road closures, a procedure in place to contact GSL for advice should this situation arise. Deviations from the route designated are not permitted without authorisation from the Mexican Civil Defence (MCD).

All emergencies are dealt with by the MCD. It is the responsibility of the MCD to inform manage and organise any outside responders and communities if there is a requirement. The MCD control and manage all accidents/incidents. GSL provide in their ERP contact information, roles and responsibilities and procedures that need to be followed.

The ERP specifies the type of vehicles to be used for the transportation of cyanide. The vehicles used for the transportation of cyanide are articulated “box” trailers. The interim storage facilities comprise concrete blocks and corrugated steel side walls, corrugated apex rooves and concrete floors. Both warehouses (Cedi and Hermosillo) have roller shutter doors and purpose built loading bays for loading on to the box trailers.

GSL ERP describes procedures for emergency situations (incidents/accidents). The ERP prescribes the roles and responsibilities, contacts information and procedures that need to be followed. The MCD on arrival at the incident/accident take over the control and management of any situation. Each transporting company also has their own ERP plans which are reviewed by GSL and have been supplied to the Auditor.

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

The operation is  in full compliance with  
 in substantial compliance with Transport Practice 3.2  
 not in compliance with

**SUMMARY AUDIT REPORT**  
**GREEN SUPPLY AND LOGISTICS**

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

Emergency response is the responsibility of both GSL and the individual sub-contractors.

Each sub-contractor provides emergency response training to its employees. GSL reviews all cyanide specific training given and has its own accredited instructor.

The MCD authorities will oversee activities and coordinate response providers in the case of an emergency.

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

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

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

The Mexican Civil Defense (MCD) will be notified of any emergency. In an immediate emergency situation the MCD have the authority to make any decisions deemed necessary to stabilize a situation. (protect life, property and the environment).

In case of a transportation clean-up the responsibility of remediation is organized between the transporter, distributor, manufacturer, the recipient of the material (mines), and the insurance companies. Technically, the primary responsibility falls to the transporter. In the case, of the warehouses where material is being stored, the responsibility will be between the warehouse, the distributor and the insurance companies. Procedures for remediation (neutralization (maintaining a pH >7 so that the potential to evolve HCN gas will be mitigated), decontamination of soils or other contaminated media) are provided in each ERP based on the requirements in Mexican "Regulation for the Ground Transportation of Dangerous Goods and Waste" article references 56, 57,109, 114 and 118.

GSL have documentation reviews in place.

Transport Practice 3.4: *Develop procedures for remediation of releases that recognize the additional hazards of cyanide treatment chemicals.*

The operation is  in full compliance with  
 in substantial compliance with Transport Practice 3.4  
 not in compliance with

**SUMMARY AUDIT REPORT**  
**GREEN SUPPLY AND LOGISTICS**

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

The Mexican Civil Defense (MCD) will be notified of any emergency. In an immediate emergency situation the MCD have the authority to make any decisions deemed necessary to stabilize a situation. (protect life, property and the environment). Follow up remediation if needed will be the responsibility of the Transporter or Distributor. Decontamination of soils or other contaminated media) are provided in each ERP based on the requirements in Mexican “Regulation for the Ground Transportation of Dangerous Goods and Waste” article references 56, 57,109, 114 and 118.

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

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

GSL have implemented a procedure to periodically review and evaluate all sub-contractor documentation and ensure that it complies with their own overarching policies and the ICMC. This includes version numbers and dates on each document.

The auditor has conducted a review of drill reports and can confirm that drills are being conducted.



**SUMMARY AUDIT REPORT**

**JUNE 2019**

**INTERNATIONAL CYANIDE MANAGEMENT INSTITUTE**

**Supply Chain Recertification Audit - ENLACE**



Prepared by

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## SUMMARY AUDIT REPORT

Name of Cyanide Transportation Facility: ENLACE  
Name of Facility Owner: Enrique Soto Chavez  
Name of Facility Operator: Enrique Soto Chavez  
Name of Responsible Manager: Enrique Soto Chavez  
Address: Via Dlorencia 91, Residencial Senderos, Torreón  
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Country: Mexico  
Telephone: (871) 204-0871 Fax: N/A  
E-Mail: [Direccion@enlancelogisticoindustrial.co.mx](mailto:Direccion@enlancelogisticoindustrial.co.mx)

### Description of operation:

ENLACE is located in Torreon, Coahuila state. ENLACE has been part of the GSL supply chain since 2015. ENLACE have 9 vehicles, all vehicles have been purchased since 2016. All ENLACE drivers are licensed to carry DGs (Class E). ENLACE have been certified by the National Association of Chemical Industry (ANIQ) and are audited annually by them. ANIQ have certified ENLACE 2016, 2017 and 2018. ENLACE conducts its own internal audits on a regular basis to ensure that standards are high.

Only sections 1 and 3 have been completed. ENLACE does not operate interim storage.

## SUMMARY AUDIT REPORT

### *Auditor's Finding*

This operation is

- in full compliance
- in substantial compliance \*(see below)
- not in compliance

with the International Cyanide Management Code.

Reports: This operation has maintained full compliance with the International Cyanide Management Code throughout the previous three-year audit cycle.

Audit Company: Wardell Armstrong International Ltd

Audit Team Leader: Christine Blackmore

E-mail: [cblackmore@wardell-armstrong.com](mailto:cblackmore@wardell-armstrong.com)

Date(s) of Audit: 22 January 2019

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.

ENLACE –  
GSL Supply Chain

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June 2019

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## SUMMARY AUDIT REPORT

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

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

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

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

The route planner is based on axle weight and not type of cargo. The number of axles is selected, a permitted and possible route is shown. Please see the following link. [http://app.sct.gob.mx/sibuac\\_internet/ControllerUI?action=cmdEscogeRuta](http://app.sct.gob.mx/sibuac_internet/ControllerUI?action=cmdEscogeRuta)

Procedures are in place if there are problems identified preferred with the route or feedback from a drivers concerns whereby an alternative permitted route could be used. The routes are designated by the Mexican route planner, deviations from a permitted route is not allowed by law. In general, escorts are not required for cyanide. For the purpose of GSL supply chain, no routes has been identified as high risk.

In cases of emergency contact procedures are in place to inform the Mexican Civil Defence (MCD). The MCD take over the management and control of all emergencies and it is their responsibility to advise other external responders, medical facilities and communities if necessary.

A SETIQ (Emergency Transportation for the Chemical Industry) membership certificate has been provided.

ENLACE have been certified by the National Association of Chemical Industry (ANIQ) and are audited annually by them. ANIQ have certified ENLACE 2016, 2017 and 2018. ENLACE conducts its own internal audits on a regular basis to ensure that standards are high.

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.*

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



## SUMMARY AUDIT REPORT

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

The auditor has been provided with licensing and training documentation for all drivers, in addition to the instructor's certification. ENLACE does not use subcontractors for cyanide transportation.

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

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

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

Mexican registration documents (Tarjeta de Circulacion) have been provided for each transport vehicle.

Registration documents have been provided to the auditor for each vehicle (stating make/model, weight etc.). Equipment is adequate for the loads it will be handling. The auditor has been informed that company policy dictates that transport units must be recent models and conform to Mexican Regulations with regard to weight, dimensions and capacity in order to travel on public roads and bridges.

Procedures are in place so no vehicle is overloaded.

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

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

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

Before cyanide is loaded on to the ENLACE vehicles the cyanide boxes are inspected by the driver for damage. The vehicle loading process is observed the ENLACE driver and the warehouse supervisor, to ensure that the cyanide is loaded correctly by the folk lift truck driver and no damage incurred during this activity. Placards (UN 1689) are displayed on the vehicle identifying that cyanide is being carried.

ENLACE vehicles and trailers are inspected before loading and after loading. These inspections are recorded and if any defects appear these are remediated in-house by ENLACE or at a facility authorised by ENLACE. All vehicles and trailers are on a rolling maintenance programme with services being undertaken at set mileages.

ENLACE –  
GSL Supply Chain



June 2019

## SUMMARY AUDIT REPORT

New legislation implemented in August 2018 restricted drivers hours to 5.5hr then a 30 minute break needs to be taken. Daily hours cannot exceed 14 hrs. the GPS tracker system also monitors driving hours.

When the box trailers are fully loaded there is not room for the load to move. However, each trailer is fitted with anchors and anchor straps. Procedures are in place in case road conditions prevent the cyanide reaching its destination, a site will be designated for the transporter to remain until the journey can be resumed. Drug and alcohol testing is undertaken twice a year, in addition to random tests taken by Cedi before they release the load. The Auditor witnessed the testing being carried out. All testing results are electronically recorded and kept.

*Transport Practice 1.5: Follow international standards for transportation of cyanide by sea and air.*

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



## SUMMARY AUDIT REPORT

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

The cyanide is shipped under the jurisdiction of the IMO. The auditor has no reason to believe this is not the case. ENLACE only provide road transport.

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

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

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

All vehicles are tracked using a GPS system. Each driver is provided with a company cell phone which is checked for working order before the vehicles embark on any trip. Black out areas have been identified and procedures are in place to ensure that the load and driver is monitored.

MSDS are provided by the cyanide manufacturer and is carried within the ERP with the load documentation.

### **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.*

The operation is  in full compliance with  
 in substantial compliance with Transport Practice 3.1  
 not in compliance with

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

ENLACE ERP is for road transport only. The vehicles are appropriate for the transportation of solid cyanide. The ERP gives details of contact of the MCD who take over the responsibility of any incident/accident. It is the MCD responsibility to inform all interested parties and responders.

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



## SUMMARY AUDIT REPORT

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

Certificates showing emergency response training specific to sodium cyanide has been undertaken by each driver, training records are kept. Refresher training is undertaken.

ER equipment checks form part of the daily checks and also checks before a vehicle leaves the depot. The Auditor checked random vehicles for the ER equipment during the site visit. A list of the ER equipment is contained in the ERP.

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

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

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

Contact details for the shipper, receiver/consignee and outside response providers (SETIQ) are provided in the ERP. In cases of incidents/accidents it is the responsibility of the driver/ENLACE to inform the MCD, who take over the management of the situation. It is their responsibility to inform the public, other responders, media etc.

ENLACE review the contact details monthly to ensure all contact details are up to date.

Documents provided to the auditor show the number of times a document has been altered and the date of its last revision.

ERP contact numbers are checked monthly.



## SUMMARY AUDIT REPORT

*Transport Practice 3.4: Develop procedures for remediation of releases that recognize the additional hazards of cyanide treatment chemicals.*

The operation is  in full compliance with  
 in substantial compliance with Transport Practice 3.4  
 not in compliance with

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

The auditor is aware of an agreement with an external company (ISALI) which provides soil remediation/spill clean-up services in the case of an emergency.

Procedures are in the ERP detailing recovery. No chemicals are used.

*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 3.4  
 not in compliance with

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

Documents provided to the auditor show the number of times a document has been altered and the date of its last revision. ENLACE have a specific internal auditor dedicated to reviewing and updating documents.

Procedures have been provided stating who is responsible for organising drills and the dates at which at which drills are conducted. Formats have been provided which allow details to be recorded about emergency drills and feedback to be given.

The last ER drill was December 2018 and the next drill is scheduled for August 2019.

ENLACE have a specific internal auditor dedicated to reviewing and updating documents.



**SUMMARY AUDIT REPORT**

**MARCH 2019**

**INTERNATIONAL CYANIDE MANAGEMENT INSTITUTE**

**Supply Chain Audit – PUERTO CARGUERO LOGISTICO**



Prepared by

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## SUMMARY AUDIT REPORT

Name of Cyanide Transportation Facility: PUERTO CARGUERO LOGISTICO

Name of Facility Owner: Pedro Sanchez

Name of Facility Operator: PUERTO CARGUERO LOGISTICO

Name of Responsible Manager: Pedro Sanchez

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E-Mail: [pedro.sq@puertocarguero.com](mailto:pedro.sq@puertocarguero.com)

### Description of operation:

Puerto Carguero Logistico (PCL) forms part of the GSL supply chain. PCL is located in Hermosillo, Sonora, Mexico and have 12 vehicles (2x2006, 3x2011, 2x2013 and 5x2017), all trailers are 2016. All PCL drivers are licensed to carry DGs (Class E). PCL are working towards the National Association of Chemical Industry (ANIQ) accreditation PCL anticipate certification in 2019.

Only sections 1 and 3 have been completed. PCL does not operate interim storage.

## SUMMARY AUDIT REPORT

### *Auditor's Finding*

This operation is

- in full compliance
- in substantial compliance \*(see below)
- not in compliance

with the International Cyanide Management Code.

Audit Company: Wardell Armstrong International Ltd

Audit Team Leader: Christine Blackmore

E-mail: [cblackmore@wardell-armstrong.com](mailto:cblackmore@wardell-armstrong.com)

Date(s) of Audit: 22 January 2019

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.

## SUMMARY AUDIT REPORT

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

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

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

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

PCL by law need to plan their routes by using the Mexican government website “route planner”. This will detail the permitted route that will need to be undertaken. All roads in Mexico are categorised. The routes uses highways and toll roads, which by pass towns and communities. The Auditor was given a demonstration by PCL of how the route planner works. Deviation from these routes except in abnormal conditions is not permissible and is an offence.

PCL send a reconnaissance car to check the route in advance of the cyanide transportation, PCL provide a feedback report to the drivers before the cyanide is dispatched.

A SETIQ (Emergency Transportation for the Chemical Industry) membership certificate has been provided. SETIQ forms part of the Mexican Civil Defence (MCD).

PCL are working toward accreditation by National Association of Chemical Industry (ANIQ) in 2019.

#### **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.***

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

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

The Auditor has witnessed licensing documentation for all drivers (Category E Federal License) as well as certificates showing that cyanide specific transport training has been completed. First aid training has been completed although the Auditor has not been provided with documentation confirming this.

PCL does not use subcontractors for cyanide transportation.

## SUMMARY AUDIT REPORT

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

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

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

Mexican registration documents (Tarjeta de Circulacion) have been provided for each transport vehicle.

Registration documents have been provided to the Auditor for each vehicle (stating make/model, weight etc.). Equipment is adequate for the loads it will be handling. The Auditor has been informed that company policy dictates that transport units must be recent models and conform to Mexican Regulations with regard to weight, dimensions and capacity in order to travel on public roads and bridges.

Cyanide is transported in 1 ton boxes. Both GSL (Hermosillo Warehouse) and PCL check the number of boxes being carried and the driver confirms the number during loading. The number of boxes are recorded on the consignment notes.

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

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

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

Only box trailers are used for the transportation of solid cyanide. The cyanide is contained in 1 ton sealed wooden boxes. There is room for 24 boxes in the box trailer, therefore the cargo is unable to move, however anchors and anchor straps are a standard fitting on the vehicles. Before leaving the interim storage with the cyanide cargo, the vehicle is inspected again by the driver and a representative from the interim storage staff to ensure that the documentation is in order, placards in place and no visible defects detected.

All vehicles including trailers used for the transportation of cyanide are on a rolling maintenance programme of 25,000km unless a defect is detected, in which case this is recorded, rectified and signed off before the vehicle and trailer is released.

New legislation (August 2018) has been implemented on driving hours: 5.5hrs then a 30 minute break has to be taken before resuming driving to a total of 14 hours daily total. Drivers hours are monitored using the GPS system. Time sheets are also filled in by the driver which can be cross-checked.

## SUMMARY AUDIT REPORT

Procedures state that transport can be suspended in the event of severe weather conditions and any abnormal circumstances. Should this occur a designated location will be agreed with PCL and the Mexican Police for the transporter to remain until the journey can be resumed.

All drivers are tested for drug abuse twice yearly in addition to random testing. Both Cedi and Hermosillo storage facilities implement an on the spot urine test. Results from the testing are provided to GSL for approval and confirmation of clarity before the driver is allowed to take the cyanide cargo. Records are retained by PCL and GSL.

**Transport Practice 1.5: Follow international standards for transportation of cyanide by sea and air.**

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

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

The cyanide is shipped under the jurisdiction of the IMO. The Auditor has no reason to believe this is not the case.

PCL are road transporters only.

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

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

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

All vehicles are tracked using a GPS system. Each driver is provided with a cell phone. The cell phone is checked before the driver leaves. Re-charging is available in the cab of the vehicle. Blackout areas have been identified and a procedure whereby the GPS alarms when it loses track. The PCL office has estimated times when a vehicle comes out of blackout areas and telephone the driver. The GPS also alarms when it picks up again.

Security seals are attached to the trailer doors with a security tag with an individual number, this is logged on to the chain of custody documentation. The driver is not permitted to break the security seal.

MSDS are provided by the cyanide manufacturer and is carried within the ERP with the load documentation.

## SUMMARY AUDIT REPORT

**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.*

The operation is  in full compliance with  
 in substantial compliance with Transport Practice 3.1  
 not in compliance with

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

PCL ERP is for road transport only. The vehicles and box trailers are appropriate for the transportation of solid cyanide. The cyanide is contained in sealed wooden boxes. These are loaded into box trailers. The ERP gives details of contact of the MCD/SETIQ who take over the responsibility of any incident/accident. It is the MCD/SETIQ responsibility to inform all interested parties and responders.

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

The operation is  in full compliance with  
 in substantial compliance with Transport Practice 3.2  
 not in compliance with

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

Certificates showing emergency response training specific to sodium cyanide has been undertaken by each driver, training records are kept. Refresher training is undertaken.

ER equipment checks form part of the daily checks and also checks before a vehicle leaves the depot.

The Auditor checked random vehicles for the ER equipment during the site visit.

**SUMMARY AUDIT REPORT**

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

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

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

Contact details for the shipper, receiver/consignee and outside response providers (MCD/SETIQ) are provided in the ERP. In cases of incidents/accidents it is the responsibility of the driver/PCL to inform the MCD/SETIQ, who take over the management of the situation. It is their responsibility to inform the public, other responders, media etc.

PCL review the contact details regularly to ensure all contact details are up to date.

Document management review procedures are in place.

ERP contact numbers are checked regularly.

**Transport Practice 3.4: *Develop procedures for remediation of releases that recognize the additional hazards of cyanide treatment chemicals.***

The operation is  in full compliance with  
 in substantial compliance with Transport Practice 3.4  
 not in compliance with

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

The Auditor is aware of an agreement with an external DG waste management company which provides soil remediation/spill clean-up services in the case of an emergency.

Procedures are in the ERP detailing recovery. No chemicals are used.

## SUMMARY AUDIT REPORT

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

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

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

Documents provided to the Auditor show the number of times a document has been altered and the date of its last revision. PCL have a specific internal Auditor dedicated to reviewing and updating documents.

PCL have a rolling programme for cyanide drills. The last mock drill was on 23 March 2019. The next is scheduled for 23 November 2019.

**SUMMARY AUDIT REPORT**

**MARCH 2019**

**INTERNATIONAL CYANIDE MANAGEMENT INSTITUTE**

**Supply Chain Audit – TRANSPORTES MINELOS DEL PACIFICO**



Prepared by

**WARDELL ARMSTRONG INTERNATIONAL**

Sir Henry Doulton House, Forge Lane, Etruria  
Stoke on Trent, Staffordshire, United Kingdom

[www.wardell-armstrong.com](http://www.wardell-armstrong.com)



## SUMMARY AUDIT REPORT

Name of Cyanide Transportation Facility: Transportes Minelos del Pacifico (TMP)

Name of Facility Owner: Jamie Robles

Name of Facility Operator: Transportes Minelos del Pacifico (TMP)

Name of Responsible Manager: Jamie Robles

Address: Leonilo Chavez No.110 Residencial Esmeralda, CP 28017, Manzanillo,

State/Province: Colima

Country: Mexico

Telephone: 312 155 1867

E-Mail: jrobles05@hotmail.com

### Description of operation:

TMP head office is located in Colima, Colima State and vehicle depot is 3km away. TMP has 4 vehicles, each driver is licensed for transport of DG (class E license). TMP has been with GSL for 18 months. This is their first cyanide transportation audit. TMPs main services is to transport DGs e.g. explosives and other hazardous chemicals.

Only sections 1 and 3 have been completed. TMP does not operate interim storage.

## SUMMARY AUDIT REPORT

### *Auditor's Finding*

This operation is

- in full compliance
- in substantial compliance \*(see below)
- not in compliance

with the International Cyanide Management Code.

Audit Company: Wardell Armstrong International Ltd

Audit Team Leader: Christine Blackmore

E-mail: [cblackmore@wardell-amrstrong.com](mailto:cblackmore@wardell-amrstrong.com)

Date(s) of Audit: 22 January 2019

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.

## SUMMARY AUDIT REPORT

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

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

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

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

TMP by law need to plan their routes by using the Mexican government website “route planner”. This will detail the approved route that will need to be undertaken. All roads in Mexico are categorised. The routes use highways and toll roads, which by pass towns and communities. The Auditor was given a demonstration by TMP owner of how the route planner works. Deviation from these routes except in abnormal conditions is not permissible and is an offence.

**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.***

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

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

The auditor has been provided with licensing and training documentation for all 4 drivers. Each driver has their own training record. All drivers have undertaken cyanide awareness and handling training. TMP does not use subcontractors for cyanide transportation.

## SUMMARY AUDIT REPORT

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

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

Summarize the basis for this Finding/Deficiencies Identified:

Mexican registration documents (Tarjeta de Circulacion) have been provided for each transport vehicle.

Registration documents have been provided to the auditor for each vehicle (stating make/model, weight etc.). Equipment is adequate for the loads it will be handling. The auditor has been informed that company policy dictates that transport units must be recent models and conform to Mexican Regulations with regard to weight, dimensions and capacity in order to travel on public roads and bridges.

The cyanide is in 1-ton boxes, these are counted on to the vehicle in accordance with the bill of lading, which prescribes the weight to be carried. The driver also counts the number of boxes loaded.

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

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

Summarize the basis for this Finding/Deficiencies Identified:

Only box trailers are used for the transportation of solid cyanide. The cyanide is contained in 1 ton sealed wooden boxes. There is room for 24 boxes in the box trailer, therefore the cargo is unable to move, however anchors and anchor straps are a standard fitting on the vehicles. Before leaving the interim storage with the cyanide cargo, the vehicle is inspected again by the driver and a representative from the interim storage staff to ensure that the documentation is in order, placards in place and no visible defects detected.

All vehicles including trailers used for the transportation of cyanide are on a rolling maintenance programme of 25,000km unless a defect is detected, in which case this is recorded, rectified and signed off before the vehicle and trailer is released.

New legislation (August 2018) has been implemented on driving hours: 5.5hrs then a 30 minute break has to be taken before resuming driving to a total of 14 hours daily total. Drivers hours are monitored using the GPS system. Time sheets are also filled in by the driver which can be cross-checked.

## SUMMARY AUDIT REPORT

Procedures state that transport can be suspended in the event of severe weather conditions and any abnormal circumstances. Should this occur a designated location will be agreed with TMP and the Mexican Police for the transporter to remain until the journey can be resumed.

All drivers are tested for drug abuse twice yearly in addition to random testing. Both Cedi and Hermosillo storage facilities implement an on the spot urine test. Results from the testing are provided to GSL for approval and confirmation of clarity before the driver is allowed to take the cyanide cargo. Records are retained by TMP and GSL.

**Transport Practice 1.5: Follow international standards for transportation of cyanide by sea and air.**

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

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

The cyanide is shipped under the jurisdiction of the IMO. The auditor has no reason to believe this is not the case. TMP transport by road only.

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

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

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

All vehicles are tracked using a GPS system. Each driver has a cell phone. Black out areas have been identified and procedures are in place to ensure that the load and driver is monitored. Drivers telephone in after exiting a black out area.

Each driver has a cell phone in order to communicate with their office. Before the driver leaves with a cargo they call their despatcher to ensure that the phone is working. Re-charging facilities are available in the vehicle cab.

After loading of the cyanide on to the vehicle the doors are closed and a security seal attached with a serial number. This number is written on the consignment notes, together with the number of boxes loaded. The driver is not permitted to break this seal.

MSDS are provided by the cyanide manufacturer and is carried within the ERP with the load documentation.

**SUMMARY AUDIT REPORT**

**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.***

The operation is  in full compliance with  
 in substantial compliance with Transport Practice 3.1  
 not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

TMP ERP is for road transport only. The vehicles are appropriate for the transportation of solid cyanide. The ERP gives details of contact of the MCD who take over the responsibility of any incident/accident. It is the MCD responsibility to inform all interested parties and responders.

TMP ERP is for road transport only. The vehicles are appropriate for the transportation of solid cyanide. The ERP gives details of contact of the MCD who take over the responsibility of any incident/accident. It is the MCD responsibility to inform all interested parties and responders.

The ERP specifies the type of vehicles to be used for the transportation of cyanide. The vehicles used for the transportation of cyanide are articulated “box” trailers. The interim storage facilities comprise concrete blocks and corrugated steel side walls, corrugated apex rooves and concrete floors. Both warehouses (Cedi and Hermosillo) have roller shutter doors and purpose built loading bays for loading on to the box trailers.

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

The operation is  in full compliance with  
 in substantial compliance with Transport Practice 3.2  
 not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

Certificates showing emergency response training specific to dangerous goods has been undertaken by each driver, training records are kept. Refresher training is undertaken.

The ERP contains a description of the roles and responsibilities in case of emergency.

ER equipment checks form part of the daily checks and also checks before a vehicle leaves the depot. The Auditor checked a random vehicle for the ER equipment during the site visit.

## SUMMARY AUDIT REPORT

ER equipment checks form part of the daily checks and also checks before a vehicle leaves the depot. The Auditor checked a random vehicle for the ER equipment during the site visit.

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

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

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

Contact details for the shipper, receiver/consignee and outside response providers (SETIQ) are provided in the ERP. In cases of incidents/accidents it is the responsibility of the driver/TMP to inform the MCD, who take over the management of the situation. It is their responsibility to inform the public, other responders, media etc.

TMP manager reviews the ERP periodically to ensure that any changes have been undertaken, and ensures that all contact numbers are up to date.

**Transport Practice 3.4:    *Develop procedures for remediation of releases that recognize the additional hazards of cyanide treatment chemicals.***

The operation is     in full compliance with  
                                  in substantial compliance with Transport Practice 3.4  
                                  not in compliance with

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

Recovery procedures are in the ERP. No chemicals are used.

**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

## SUMMARY AUDIT REPORT

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

There is a version number and date on the TMP ERP. This also indicates when the management review should take place on the document.

Mock drill for DGs have taken place during driver refresher training session.

TMP are planning to undertake a cyanide drill in April 2019.

**SUMMARY AUDIT REPORT**

**JUNE 2019**

**INTERNATIONAL CYANIDE MANAGEMENT INSTITUTE**

**Supply Chain Recertification Audit – CEDI GALEON**



Prepared by

**WARDELL ARMSTRONG INTERNATIONAL**

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[www.wardell-armstrong.com](http://www.wardell-armstrong.com)



## SUMMARY AUDIT REPORT

Name of Cyanide Transportation Facility: Cedi Galeon  
Name of Facility Owner: Marco Vega  
Name of Facility Operator: Marco Vega  
Name of Responsible Manager: Marco Vega  
Address: Carr. Manzanillo – mina km, 16 Col., Tapeixties, CP 28239, Manzanillo  
State/Province: Colina Country: Mexico  
Telephone: (314) 114 03 90 Fax: N/A E-Mail: [mvega@cedigalleon.com](mailto:mvega@cedigalleon.com)

### Description of operation:

GSL sub-contract interim storage in Manzanillo to Cedi Galeon as part of their 'Mexico Supply Chain'. A review of Cedi Galeon's documentation was undertaken as part of the recertification audit and a site visit undertaken 22 January 2019.

Cedi Galeon continue to store cyanide for GSL, although the through put has reduce slightly. Cedi Galleon now collect the cyanide containers from the port 1km distance. Cedi Galeon is located on the main dock yard road. They operate 2 shunting vehicles for this purpose. These vehicles are not involved in any freight forwarding, however the Auditor has discussed some sections of the transportation audit to cover the appropriateness of these vehicles and their management.

For the purpose of the audit only Sections 2 and 3 have been completed, however the Auditor has inspected and discussed the 2 shunting vehicles used to carry cyanide from the port to the storage facility. The drivers both have DG licenses (Class E). the vehicles are serviced every 100 hours. Daily vehicle checks are undertaken by the drivers, these are also undertaken by the port authority before they are allowed to enter the port, this is a strict requirement. Each vehicle has ER equipment, ERP and consignment notes. DG vehicles are escorted all the time they are in the port area by law.

## SUMMARY AUDIT REPORT

### *Auditor's Finding*

This operation is

- in full compliance
- in substantial compliance \*(see below)
- not in compliance

with the International Cyanide Management Code.

Include one of the following statements for Recertification Audit Reports:

This operation has maintained full compliance with the International Cyanide Management Code throughout the previous three-year audit cycle.

Audit Company: Wardell Armstrong International Ltd

Audit Team Leader: Christine Blackmore

E-mail: cblackmore@wardell-armstrong.com

Date(s) of Audit: 22 January 2019

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.

## SUMMARY AUDIT REPORT

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

Transport Practice 2.1: *Store cyanide in a manner that minimizes the potential for accidental releases.*

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

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

Cyanide is stored within a secure facility with adequate signage and separated from the incompatible substances. The interim storage facility is well ventilated. The integrity of the building and floor was checked and is in good condition.

The warehouse is surrounded by a perimeter fence with a locked gate and has fulltime security staff present 24/7 days a week. CCTV is in operation both inside and outside of the facility.

### **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.*

The operation is  in full compliance with  
 in substantial compliance with Transport Practice 3.1  
 not in compliance with

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

The auditor has reviewed a copy of the ERP which includes the updates of the shunting vehicles and their requirements of the port authorities and is adequate for the short transportation distance and the cyanide storage facility. The ERP discusses the form of cyanide (solid) and all ER measures necessary should there be an incident. This document is reviewed by Cedi Galeon annually for changes, appropriateness and confirming responders contact details.

## SUMMARY AUDIT REPORT

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

The operation is  in full compliance with  
 in substantial compliance with Transport Practice 3.2  
 not in compliance with

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

Cedi Galeon provides emergency response training and details the specific response duties of individual employees within the ERP. Refresher training was undertaken in October 2018. The ERP now includes the 2 shunting vehicles and drivers.

Cedi Galeon provide PPE to all employees handling cyanide and provide additional resources of equipment in case of an emergency:

Personal Protective Equipment (PPE)

- Full facepiece with filter cartridges or particles and powders.
- Safety glasses
- Nitrile long sleeve gloves
- Tyvek suit (mixture of sizes)
- Rubber footwear \_\_\_\_\_

Equipment

- Shovel
- Brush
- Bucket
- Drain cover
- Large rubber bags
- Traffic cones
- Barricade tape
- Pennants
- Rubber footwear
- First Aid Kit
- Eye wash
- Antidote (*Amyl Nitrite*)

The emergency equipment is stored in a designated store cupboard in the cyanide warehouse. This is checked monthly by the facility manager.

The MCD authorities will coordinate emergency responses involving cyanide, this includes notification of external responders and liaison with communities and the media.

## SUMMARY AUDIT REPORT

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

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

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

Procedures are in place to notify the relevant authorities (MCD) in case of incidents. The MCD Authorities will coordinate emergency response actions. Procedures are updated annually; the auditor has been presented with documentation. The document was amended following the inclusion of its own shunting service from the port to the storage facility. A copy of the ERP needs to be presented to the "Fire" department on entry to the port area.

All DGs have an escort provided by the port authority "Fire" department entering the port boundary area.

Transport Practice 3.4: *Develop procedures for remediation of releases that recognize the additional hazards of cyanide treatment chemicals.*

The operation is  in full compliance with  
 in substantial compliance with Transport Practice 3.4  
 not in compliance with

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

The ERP provides initial response procedures for remediation, including recovery of solids. The MCD authorities provide response coordination and management for any incidents/accidents. Cedi Galeon provide ER equipment and PPE to its employ, additional equipment is available. The ER equipment and checked on a regular basis, equipment check lists were made available. Both shunting vehicles carry ER equipment.

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

## SUMMARY AUDIT REPORT

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

The emergency response plan is reviewed annually. Mock emergency drills were conducted in October 2018 as part of the refresher training. Important changes to the ERP was the incorporation of the two shunting vehicles that Cedi Galeon now use. Feedback forms/actions required were provided to the Auditor to confirm Cedi Galeón performance.

**SUMMARY AUDIT REPORT**  
**JUNE 2019**  
**INTERNATIONAL CYANIDE MANAGEMENT INSTITUTE**  
**Supply Chain Audit – Hermosillo Warehouse**



Prepared by

**WARDELL ARMSTRONG INTERNATIONAL**

Sir Henry Doulton House, Forge Lane, Etruria

Stoke on Trent, Staffordshire, United Kingdom

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## SUMMARY AUDIT REPORT

Name of Cyanide Transportation Facility: Hermosillo Warehouse  
Name of Facility Owner: Green Supply and Logistics  
Name of Facility Operator: Green Supply and Logistics  
Name of Responsible Manager: Victor Zambrano  
Address: Viaidad El Panetario No 36, Parque Industrial CP83165 Hemosillo  
Senora, Mexico State/Province: Senora  
Country: Mexico Telephone: 662 2030792  
E-Mail: victor@clanuroenmeixoc.com

### Description of operation:

Hermosillo Warehouse (HW) is owned by GSL and is a new feature to GSL supply chain. It is used solely for cyanide storage. The cyanide is imported from Hebei, China and comes into the port of Guaymas and then transported to HW approximately 156km. Cyanide transportation from Guaymas to Hermosillo is provided by Puerto Carguero Logistico (PGL) who also form part of GSL supply chain. The drivers both have DG licenses (Class E). Daily vehicle checks are undertaken by the drivers, these are also undertaken by the port authority before they are allowed to enter the port, this is a strict requirement. Each vehicle has ER equipment, ERP and consignment notes. DG vehicles are escorted all the time they are in the port area by law.

For the purpose of the audit only Sections 2 and 3 have been completed.

## SUMMARY AUDIT REPORT

### *Auditor's Finding*

This operation is

- in full compliance
- in substantial compliance \*(see below)
- not in compliance

with the International Cyanide Management Code.

Audit Company: Wardell Armstrong International Ltd

Audit Team Leader: Christine Blackmore

E-mail: [cblackmore@wardell-armstrong.com](mailto:cblackmore@wardell-armstrong.com)

Names and Signatures of Other Auditors:

Date(s) of Audit: 22 January 2019

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.

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## SUMMARY AUDIT REPORT

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

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

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

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

The warehouse is constructed of Concrete blocks and corrugated steel. Security fencing is in place and the industrial park is staffed 24/7. CCTV is also in place. All health and safety warning signs are in place.

### **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.

The operation is  in full compliance with  
 in substantial compliance with Transport Practice 2.2  
 not in compliance with

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

The auditor has reviewed a copy of the ERP, the plan is adequate for storage of cyanide within an interim storage facility and considers its chemical form. Initial response actions for a number of cyanide emergencies are provided within the ERP, although the MCD/SETIQ Authorities will coordinate of a situation upon arrival.

The cyanide boxes are stored on pallets. The warehouse is constructed of partial concrete breeze blocks and partial corrugated steel walls and corrugated apex roof.

## SUMMARY AUDIT REPORT

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

The operation is  in full compliance with  
 in substantial compliance with Transport Practice 2.2  
 not in compliance with

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

Hermosillo provides emergency response refresher training every 6 months and details the specific response duties of individual employees within the ERP. Although Mexico does not require Hermosillo to provide PPE to employees handling cyanide, equipment is provided regardless, and additional resources are made available.

The MCD authorities will coordinate emergency responses involving cyanide, this includes notification of external responders and liaison with communities and the media.

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

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

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

Procedures are in place to notify the relevant authorities (MCD). The MCD/SETIQ Authorities will coordinate emergency response actions. Procedures are checked every 6-months, the auditor has been presented with copy of the ERP for confirmation.

Transport Practice 3.4: *Develop procedures for remediation of releases that recognize the additional hazards of cyanide treatment chemicals.*

The operation is  in full compliance with  
 in substantial compliance with Transport Practice 3.4  
 not in compliance with

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

The ERP provides initial response procedures for remediation, including recovery of solids. Any incidents/accidents are reported to the MCD/SETIQ authorities who provide response coordination and management.

## SUMMARY AUDIT REPORT

The Mexican Civil Defense (MCD) will be notified of any emergency. In an immediate emergency situation the MCD have the authority to make any decisions deemed necessary to stabilize a situation. (protect life, property and the environment). Follow up remediation if needed will be the responsibility of the Transporter or Distributor. Decontamination of soils or other contaminated media) are provided in each ERP based on the requirements in Mexican “Regulation for the Ground Transportation of Dangerous Goods and Waste” article references 56, 57,109, 114 and 118.

*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

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

The ERP is reviewed every 6 months for accuracy such as telephone contact numbers. Mock emergency drills are conducted as part of the refresher training. After the drills a report is prepared to analyse the scenario and participant/equipment performance. The ERP is updated if necessary.