

CONTRANS S.A.C.

Cyanide Supply Chain

Recertification Audit of Cyanide Supply Chain including transportation
from Port of Callao – Peru to Contrans S.A.C warehouse

Summary Audit Report

International Cyanide

Management Code

Prepared by Bruno Pizzorni – Lead Auditor


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Lima, Perú

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Information on the Audited Operation

Name of Supply Chain Consignor:	Contrans S.A.C.		
Address:	Av. Oquendo Mza. H-L Ex-Fundo Oquendo, Callao, Peru		
Name of Responsible Manager:	Marco Málaga Rodríguez – Integrated Management System Manager		
Telephone:	+51 1 612-3500 ext. 3572	E-Mail:	marco.malaga@contrans.com.pe
State/Province:	Callao	Country:	Peru
Name of Transporter included in this Supply Chain	<ul style="list-style-type: none"> • Transportes Meridian S.A.C. – Transport from Port of Callao – Peru to Contrans S.A.C. warehouse. Transport company certified in the ICMC. • Contrans S.A.C. – Consignor. Warehouse unloading truck, storing cyanide, no opening of boxes or drums, loading truck. Warehouse previously certified in the ICMC. 		
Names and contact information for Transporters:	Transportes Meridian S.A.C. Av. Oquendo Mza. H-L, Ex Fundo, Oquendo. Callao, Lima, Perú Javier Espinoza S. - Integrated Management System Manager T: +51 1 626-1000 ext. 3724 javier.espinoza@tmeridian.com.pe		

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Supply Chain Overview

Contrans S.A.C. (Contrans), with headquarters located in Callao, Perú maintains a sodium cyanide supply chain with intentions to recertify the International Cyanide Management Code (ICMC).

This Supply Chain includes road transportation of cyanide from Port of Callao by Transportes Meridian S.A.C. (Meridian), to the Contrans cyanide warehouse in Callao, Perú.

- a) Transportation from the Port of Callao to Contrans warehouse using ICMC-certified Meridian trucking company (certified on January 10, 2020).
- b) Storage and distribution of sodium cyanide at the ICMC-certified Contrans warehouse (certified on January 26, 2017).

Contrans S.A.C. (Contrans) is a subsidiary company of Transmeridian, a shipping and port agency with operations in Callao Port.

Contrans provides logistical services to companies in different sectors. The company provides comprehensive logistics solutions storage, distribution, transportation. It works with containers, loose cargo and project loads for exports and imports, both maritime and land. Also offers services associated with the supply chain of its customers and merchandise distribution, for which it has a fleet of trucks. The company works under a control and monitoring system such as balance services and satellite tracking through GPS equipment. Performs transportation and distribution services nationwide.

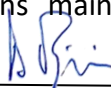
Contrans Cyanide Supply Chain includes management of sea containers at Callao Port customs, transport of containers from the port to Contrans warehouse at Callao, containers storage, unloading of cyanide from sea containers, storage and dispatching to clients. Solid cyanide briquettes are delivered in 20-foot sea containers, in 1-ton wooden Intermediate Bulk Containers (IBC)s and/or in 100 kg metal drums.

Contrans maintains procedures to select carriers and closely monitors all aspects of ICMC compliance of its supply chain. Contrans maintains a formally documented policy that only ICMC certified transportation partners will be used for cyanide shipments from Port of Callao. Contrans employees are in attendance during all deliveries to the warehouse. Contrans confirm that drivers are fit for duty, that equipment is fit for service prior to each delivery and that shipments are tracked continuously. Contrans personnel perform all functions related to product unloading. Emergency response in the event of an unplanned event will be attended by Meridian during transportation with close follow-up from Contrans. Emergencies in the warehouse will be attended by Contrans.

Transport of sea containers from Callao Port to Contrans warehouse is performed by Transportes Meridian S.A.C., also a subsidiary company of Transmeridian. Meridian trucking company is an ICMC certified company, last certificated on January 10, 2020.

Meridian maintains tractors and trailers. Route risk assessments is performed by Meridian. Contrans escorts the shipments. Unloading and loading activities are performed by Contrans employees at the warehouse. Contrans maintains all necessary emergency response

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equipment in case there is an on-site emergency at the warehouse. If there is a transport emergency, it would be managed by the transport company.


Transport of sodium cyanide from Contrans warehouse to clients is not included under this Cyanide Supply Chain and therefore is out of the scope of this audit.

Contrans warehouse, with an area of 45,000 m², is located 9 km from the port of Callao. Within this facility is an area designated to store 20-foot sea containers with hazardous material, including sodium cyanide. Another area is designated for cyanide empty containers and other for cyanide a warehouse where sodium cyanide is stored in IBC and drums.

The audit was conducted through a review of procedures and records, and interviews with the Contrans Senior Management, HSE Coordinator and warehouse operators, among others. The auditor used the ICMI Cyanide Production Protocol to evaluate International Cyanide Management Code (ICMC) compliance. The Contrans warehouse, was visited during this audit and the related due diligence activities. Meridian, the trucking company, was subject to an ICMI recertification audit the previous week by the same auditor, resulting in Full Compliance.

The audit was based on a sampling of information and therefore deficiencies may exist which have not been identified. The audit was performed by an independent third-party auditor who was pre-approved by the ICMI as a Lead Auditor for all types of International Cyanide Management Code (ICMC) audits and as a technical expert for ICMC audits of cyanide transportation, production plants and mining operations. All supply chain components noted above were included in this ICMC Recertification Audit.

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Auditor's Finding

This operation is

- ✓ in full compliance with
- in substantial compliance
- not in compliance with

with the International Cyanide Management Code.

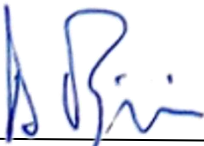
This operation has maintained full compliance with the International Cyanide Management Code throughout the previous three-year audit cycle. Although the auditor initially found situations involving isolated problems rather than programmatic deficiencies, where the issues involve mainly paperwork and retention of records, after the audit the operation making a good-faith effort, was able to comply with the Code before submitting the audit reports to the ICMI.

Audit Company:	Bruno Pizzorni		
Audit Team Leader:	Bruno Pizzorni	E-mail:	bpizzorni73@gmail.com
Transport Technical Auditor:	Maria del Pilar Arrese		Sign: 
Date(s) of Audit:	November 4 and 5, 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.

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ICMI Production Protocol

Principle 1 – Operations:

Design, construct and operate cyanide production facilities to prevent release of cyanide

Production Practice 1.1: Design and construct cyanide production facilities consistent with sound, accepted engineering practices and quality control/quality assurance procedures.

The operation is

- ✓ *in full compliance with* *Production Practice 1.1*
- *in substantial compliance*
- *not in compliance with*

Summarize the basis for this Finding:


During the audit, no records of quality control (QC) and quality assurance (QA) programs, project plans, as built plans or construction licenses or approvals were found for Contrans cyanide warehouse construction. After the audit Contrans provided the Certificate of Technical Inspection of Security in Multidisciplinary Buildings, valid until October 3, 2020 issued by the Civil Defense (INDECI) Management of the Provincial Municipality of Callao, certifying that Contrans complies with the regulations on the subject security in buildings in force. INDECI has qualified personnel which perform biannual health and safety inspections to all commercial facilities. During the site visit the auditor confirmed by visual inspection that the warehouse infrastructure was in good conditions. The auditor validated the authority approval in compliance with the Code in absence of records of quality control (QC) and quality assurance (QA) programs.

The materials used in the construction of the warehouse are appropriate for the use of the facility. There are no solutions used in this operation, there is only solid sodium cyanide. The facility pavement where cyanide is stored is sealed with asphalt that was in good condition at the time of inspection. The warehouse has masonry walls and a roof with waterproof tarpaulin.

There are no automatic systems in the cyanide warehouse. A power outage or equipment failure would not result in a cyanide release. Contrans only handle cyanide in containers, wooden boxes and metal drums.

Asphalt surfaces protect the ground throughout the facility where cyanide is managed, which is adequate to minimize seepage to the subsurface, considering that Contrans operations do not include opening cyanide boxes or drums. During the sit visit, the auditor confirmed the asphalt pavement is adequate to provide a competent surface against underground infiltration.

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The facility does not employ methods to prevent overflowing as does not handle cyanide in liquid state, in vessels or tanks.

Sea containers are stored over an asphalt pavement in good conditions. The spillage of one tone bag (IBC) of cyanide would be a possible scenario: any liquid generated from cleaning activities will be collected through the rainwater gutter that unloads in plastic containers. Although the building housing the transfer facility is provided with roofing, flood by storm capacity is not a significant consideration as this area is on an elevated embankment with respect to the surroundings.

Contrans does not handle cyanide solutions, there are no solutions pipelines.

No additional information was required to find this Production Practice in full compliance with the Code.

Production Practice 1.2: Develop and implement plans and procedures to operate cyanide production facilities in a manner that prevents accidental releases.

The operation is

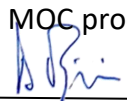
- in full compliance with* *Production Practice 1.2*
- in substantial compliance*
- not in compliance with*

Summarize the basis for this Finding:

In occasion of the site audit, no working procedures or plans were found for cyanide-related activities describing the standard practices necessary for its safe and environmentally sound operation and also not found procedures or plans for contingencies during upsets in its activities that may result in cyanide exposures or releases. After the audit Contrans presented the revised work procedure DS-P-001 Income Storage and Dispatch of Loose Cargo - Hazardous Materials and Chemical Supplies and Controlled Goods, including training records on the procedure, where cyanide related safe work procedures were specifically addressed. Also, Contrans provided a revised version of its Emergency Response Plan which included procedures for contingencies during upsets in its activities, where among other procedures, included the case they recently had of cyanide packaging (boxes and drums) contaminated with a white particulate matter, that needed to be analyzed resulting it was sodium cyanide. The auditor reviewed de last version of the, including training records provided to all personnel involved in the cyanide operations, finding it in full compliance with the Code requirements.

The Management of Change (MOC) Procedure reviewed during the audit, did not include health, safety and environment (HSE) risk assessment. After the audit Contrans provided the procedure SG-P-010 Change Management v2 from March 24, 2020 adding the protocol required to evaluate any risk from health, safety and environmental perspective associated with proposed change and the format SG-R-028 Change Planning to evaluate the risks. The auditor reviewed this last version of the MOC procedure along with training records, and an

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example of a completed MOC form register, evaluating risks related to the warehouse area ampliation. The MOC register was signed by the health and Safety (H&S) Supervisor and the environmental responsible, among others.

A preventive maintenance program has been developed and implemented in Contrans. The supervisor of heavy equipment is responsible to ensure forklifts and reach stacker are maintained according to the frequency and responsibilities stablished in the monthly maintenance program. It is worker's responsibility to report daily the hour meter readings installed in every heavy equipment and to coordinate the preventive maintenance ahead of time. Additionally, forklifts and reach stacker are inspected at the start of the work shift. The inspection is recorded using a checklist.

During the audit, no cyanide process parameters were being monitored at the facility. This condition resulting in substantial compliance did not present an immediate or substantial risk to health, safety or the environment while it was being corrected as Contrans activities at the warehouse are limited to receive containers, unload cyanide in IBC and drums from containers, dispatch sea containers and loose cargo (IBC and drums) with solid sodium cyanide. To monitor HCN gas levels while performing cyanide related activities in the warehouse, in I occasion of the audit Contrans was purchasing a portable HCN gas monitor.

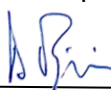
After the audit Contrans confirmed they already had the monitor MSA Altair Pro at site, but it needed to configure the device to be calibrated with the low (4.7 ppm) and high (10 ppm) alarms. After the audit, the instrument purchaser confirmed by email that they will recalibrate the HCN gas as required, as soon as all activities are initiated. In the meantime, Contrans included in his reception and loading procedure that the monitor must be actively checked several times in a shift, to ensure that the site is aware if it exceeds 4.7 during a shift, so that any cause can be investigated and action taken to prevent an exposure level exceeding 4.7 over an eight hour period.

Contrans manages only packed solid cyanide and there are no cyanide solutions in the warehouse. The auditor did not find a procedure or instruction for final disposal of solid cyanide, cyanide-contaminated water or solids. In case of water produced from floors cleaning in the storage area, it would be collected through the rainwater gutter that unloads in plastic containers and will remain in it as is not connected to the public drainage network. Rain In the area is very scarce, Callao is in an arid area. Liquid collected in the area could include water from eye wash and emergency shower testing, storm water, cleaning water or any spill.

As stated by Contrans responsible of the Integrated Management System (IMS), for water possibly contaminated with cyanide, Contrans will ask a specialized contractor to take this water in containers to be transported to its final disposition as hazardous waste. A certification of adequate disposal will be issued by the contractor

The auditor did not find during the audit procedures or instructions for final disposal of solid cyanide, cyanide-contaminated water or solids. After the audit, Contrans included in its Emergency Plan detailed descriptions for disposal of cyanide and cyanide-contaminated

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solids, including the contractor *Jac Soluciones Ambientales*, which will be in charge for retrieving all contaminated material and taking it to a safe landfill for hazardous material managed by contractor Petramas.

All storage of cyanide at the facility has adequate ventilation to prevent the build-up of hydrogen cyanide gas. The facility stores sea containers in an open yard and cyanide loose cargo in a covered area surrounded by a wire mesh which allows for excellent natural ventilation.

All operations to unload cyanide from containers are performed outdoors, so there is minimal potential for build-up of hydrogen cyanide gas. The opening of shipping containers is subject to a procedure requiring time for ventilation. In occasion of the audit Contrans was implementing atmospheric testing prior to unload the container by means of an HCN gas detector.

Cyanide is stored with measures to avoid or minimize the potential for exposure of cyanide to moisture. Maritime containers provide protection for material exposure to moisture due to their design. Containers are stored at the facility yard on an area slightly elevated from surroundings areas to avoid floods hazards.

The cyanide loose cargo storing area is on an asphalt pavement, all this area is under a tarpaulin covered rea. Cyanide is received in plastic bags within a wooden box and sealed metal drums. This area has been also selected as it has a height slightly greater than that of the surrounding areas, being unlikely the presence of flood events.


It is noted that cyanide is stored in double layers of plastic lining within wooden boxes within shipping containers. Hence, there are substantial measures to minimize the potential for exposure of cyanide to moisture. No cyanide operation is done under rainy conditions.

Contrans facility has a security shed and access is controlled. In addition, access to the cyanide storage area is secured by a locked door and access to it is only allowed to authorized personnel. The entire perimeter of the facility is closed and guarded 24 hours. It has numerous cameras strategically located TV.

Contrans procedure *Entry to the Warehouse and Container Dispatch*, requires inspections to ensure all containers are in good conditions and properly labeled. The procedure calls to verify that placards and other signage are used to identify the shipment being dispatched from the facility as solid cyanide, as required by national and international regulations or standards.

The placards used on containers, include United Nations (UN) numbers and dangerous goods class labels, both of which are prescribed in the UN Model Regulations and the IMDG Code (International Maritime Dangerous Goods Code). Both on arrival and departure the containers are checked at the facility to ensure that all signage is in place. No additional information was required to find this Production Practice in full compliance with the Code.

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Production Practice 1.3: Inspect cyanide production facilities to ensure their integrity and prevent accidental releases.

The operation is

- ✓ *in full compliance with Production Practice 1.3*
- *in substantial compliance*
- *not in compliance with*

Summarize the basis for this Finding:

Although there are no tanks holding cyanide solutions in the facility as Contrans operations are limited to the storage of cyanide in solid state, the auditor requested Contrans to include into the inspection program the plastic tank placed in the cyanide loose cargo warehouse for integrity.

The auditor reviewed daily inspection registers to all the warehouse, including areas for cyanide containers storing and the “loose cargo area”, where cyanide in boxes and drums is stored, and although was a general inspection, it was being done. Contrans, in a good faith effort to comply with the Cyanide Code, the second day of the audit began performing specific inspections to the cyanide warehouse, with an inspection list where all the necessary elements to check were incorporated. Contrans complied with submitting records of inspections performed during the two months following the onsite audit.


.There are no tanks holding cyanide solutions in the facility. This element is not applicable to Contrans operations as these are limited to the storage of cyanide in solid state.

Although a general inspection to the whole facility is performed daily, no specific inspection to the cyanide warehouse or inspections with enough detail to cyanide storing area was found during the audit. Contrans, in a good faith effort to comply with the Cyanide Code, the second day of the audit began performing specific inspections to the cyanide warehouse, with an inspection list where all the necessary elements to check were incorporated. The auditor found that inspections are documented at Contrans by mean of the checklist SF -R-002 Facilities Inspection - Perimeter Barriers and Infrastructure, Lighting and Equipment and include the date of the inspection, the name of the inspector. In few cases deficiencies were reported. After the audit Contrans complied submitting daily inspection records, where the auditor confirmed deficiencies are being reported.

The auditor found that few cases of deficiencies were reported and so the corrective actions. After the audit, Contrans submitted for the auditor revision documents of corrective actions covering a period of two months after the audit. The nature and date of the corrective actions were documented in the same the checklist for the warehouse inspection SF-R-002 Facilities Inspection - Perimeter Barriers and Infrastructure, Lighting and Equipment, after the identified deficiencies.

No additional information was required to find this Production Practice in full compliance with the Code.

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Principle 2 – Worker Safety:

Protect workers' health and safety from exposure to cyanide

Production Practice 2.1: Develop and implement procedures to protect plant personnel from exposure to cyanide.

The operation is

- ✓ in full compliance with *Production Practice 2.1*
- *in substantial compliance*
- *not in compliance with*

Summarize the basis for this Finding:


During the audit, the procedure DS-P-001 Income, Storage and Dispatching of Loose Loads - Hazardous Materials and Chemical Supplies and Controlled Assets v6 dated January 17, 2019 was reviewed and although it established guidelines for the identification and continuous assessment of hazards, control of safety-related risks and occupational health and environment during transport, storage and handling of hazardous material, the procedure does not referred to cyanide related activities. After the audit, Contrans submitted the auditors the reviewed version of this procedure, v7 dated February 28, 2020 where normal plant operations were addressed, as receiving, storage and dispatching sodium cyanide sea containers, boxes and drums, including non-routine activities and maintenance related activities. The auditors found this procedure and compliance with the Code.

Also, during the audit, was not possible to confirm that the facility has implemented procedures to review proposed process and operational changes and modifications for their potential impacts on worker health and safety and incorporate the necessary worker protection measures. After the audit Contrans provided the procedure SG-P-010 Change Management v2 (MOC) from March 24, 2020 where was added the protocol required to evaluate any risk from health, safety and environmental perspective associated with proposed change and the format SG-R-028 Change Planning to evaluate the risks. The auditor reviewed this last version of the MOC procedure along with training records, and an example of a completed MOC form register, evaluating risks related to the warehouse area ampliation. The MOC register was signed by the health and Safety (H&S) Supervisor and the environmental responsible, among others.

Contrans considers the opinion of workers to develop and evaluate health and safe processes. The procedure *Hazards Identification, Risk Assessment and Controls states* hazard's identification en risk evaluation process must be prepared and updated by the HSE Supervisor, the owner of the process and personnel of the corresponding area.

Additionally, Contrans personnel conducts Job Hazards Analysis prior to performing any new activity, the analysis includes the worker input on the risk identification, assessment and control measures.

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At the beginning of each working day, the workers and the supervisor hold daily 5-minute safety meetings, where, among other issues, workers can give their feedback on the safe work procedures. Workers also have these opportunities during training talks with the supervisor.

During the audit Contrans did not show to have monitoring devices for measuring exposure to cyanide gas. The facility was in process of buying a portable HCN monitor, as they showed the purchase order. After the audit, Contrans confirmed they already had the monitor MSA Altair Pro on site, which was calibrated according to the manufacturer recommendations, at 10 ppm. In addition, Contrans requested the instrument purchaser, to calibrate it to a first alarm set to 4.7 ppm. and sent its reviewed procedures where HCN limits were consistent establishing HCN gas limits to 4.7 ppm and 10 ppm. The instrument purchaser confirmed by email that they will recalibrate the HCN gas as required, as soon as all activities are initiated. In the meantime, Contrans included in his reception and loading procedure that the monitor must be actively checked several times in a shift, to ensure that the site is aware if it exceeds 4.7 during a shift, so that any cause can be investigated and action taken to prevent an exposure level exceeding 4.7 over an eight hour period.


During the audit, no statement was found regarding HCN monitor calibration and to state its maintenance, testing and calibration. After the audit, and as soon as they had the HCN gas monitor at site, Contrans submitted the auditor the F-G-002 Security Equipment Maintenance Program v.01 where was established the maintenance and calibration frequency for the hydrogen cyanide monitoring equipment must be maintained as directed by the manufacturer and that maintenance records must be kept.

According to Contrans hazards identification and risk assessment, the chemical danger of cyanide poisoning has been identified within the activity of the forklift operator, with the application controls of the emergency and first aid plan. In addition to this sample, no other document identifies all other areas where workers might be exposed to cyanide. After the audit Contrans identified in the Emergency Response Plan, all areas where cyanide is present as risk area and activities due to presence of sodium cyanide. Annex 1 of the Plan shows a layout of the work area with sodium cyanide. Subsequently, and once the plan was updated with other additional changes, they proceeded to communicate it to all the staff.

It was verified that the forklift operator works under supervision, however, this practice is not established in any related documentation. After the audit Contrans submitted the auditor a revised version of the work procedure DS-P-001 Income Storage and Dispatch of Loose Cargo - Hazardous Materials and Chemical Supplies and Controlled Goods v.07. dated from February 2, 2020, where on page 6 states that all personnel working with cyanide must be accompanied during this job. Also, once this procedure was approved by the auditor, Contrans proceeded to communicate the changes in the procedure to its personnel and presented the training attendance records to the auditor.

It was verified that Contrans evaluates the health of employees to determine their ability to perform their specified tasks through the matrix of occupational medical examinations of their active personnel. The medical services provider sends Contrans monthly records with

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information about the status of the personnel medical exams and any observations about them (expired exam / observed exam / exam due / no exam).

During the audit, no evidence of a documented policy for clothing changes was found. After the audit, Contrans presented an existing procedure related to a clothing change policy that they failed to present on the occasion of the audit, the procedure ST-E-001 Personal Protective Equipment and Work Uniforms. In addition, Contrans included in the Emergency Response Plan and in the cyanide working procedure, statements for employees and contractors, related to clothing change procedures.

Warning signs advising workers that cyanide is present are observed in the storage area and that, if necessary, suitable PPE must be worn, are located around the site. Warning signs are placed in the facility including entrances, cyanide warehouse and in the containers parking areas.

Specific personal protective equipment is mandatory to use as indicated entering the sodium cyanide warehouse areas. It is required goggles, helmet, safety footwear, dust mask, gloves and reflective vest.

The SOP "Cyanide Management" ST-E-004 version 01 dated October 30, 2019 establishes instructions for entering the warehouse of controlled chemical products. Within the obligations, is the prohibition from smoking, eating and drinking, and having open flames in areas where for cyanide is present.

No additional information was required by the auditor to find this Production Practice in full compliance with the Code.

Production Practice 2.2: Develop and implement plans and procedures for rapid and effective response to cyanide exposure.


The operation is

- in full compliance with* *Production Practice 2.2*
- in substantial compliance*
- not in compliance with*

Summarize the basis for this Finding:

During the audit was found the Emergency Response Plan (Plan) was is a generic document for emergency response. After the audit, Contrans submitted to the auditor a reviewed version of the Emergency Response Plan, the SG-N-006 Cyanide Preparedness And Emergency Response Plan version 3 from March 2020, describing specific emergency response procedures to respond to cyanide exposures. Once Contrans proceeded to communicate the changes in the procedure to its personnel and presented the training attendance records to the auditor.

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An emergency shower and two low-pressure eye wash stations are located at the cyanide warehouse area. Non-acidic fire extinguishers are located at strategic locations in the facility. It was verified that are maintained and inspected on a regular basis.

It was verified that the facility has water, oxygen, antidote, a resuscitator and emergency communication means. The employees have radio and cellular phones for internal communication. The facility in addition, has a Control Center with complete communication systems from where any emergency notification would be managed.

Contrans has implemented a monthly inspection checklist for first aids and emergency response equipment. The auditor reviewed completed checklists forms covering the re-certification audit period. First-aid and emergency response equipment are stored and tested as directed by their manufacturer and replaced on a schedule that assures, they will be effective when used.

The annual program of Health and safety at work states the inspection plan to be carried out throughout the year, to emergency equipment, machinery and transport units: personal protective equipment (PPE), fire network, fire extinguishers, briefcases and first aid kits, anti-spill kit, emergency shower and low-pressure eye wash stations.

The emergency response equipment is stored locked in a room near the medical services. The availability of the first aid and emergency response equipment was confirmed during the audit. The inspection checklist includes expiration dates of the first aid items.

Material Safety Data Sheets (MSDS) and first aid procedures on cyanide safety are in Spanish, the language of the workforce and are available to workers near the cyanide storage area, emergency kits and administrative offices, where employees have access to the files.

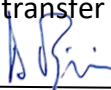
Contrans only manages solid cyanide in sea containers, IBC bags and drums. There are no process tanks, containers or piping. The auditor requested to identify the plastic tank installed at the cyanide warehouse for rainwater collection as a hazard.

During the site audit, no decontamination policy or procedure was found for employees, contractors and visitors leaving areas with the potential for skin exposure to cyanide. Later, Contrans presented an existing procedure related to a clothing change policy . The procedure ST-E-001 Personal Protective Equipment and Work Uniforms includes decontamination statements for employees, contractors and visitors leaving areas with the potential for skin exposure to chemicals and other hazardous materials. In addition, Contrans included in the Emergency Response Plan and in the cyanide working procedure, statements for employees and contractors, related to skin decontamination procedures.

Contrans has its own medical post to provide first aid or medical assistance to workers exposed to cyanide. As previously noted, oxygen tank and antidote kit are available on site as well. The site has a part time doctor on site, personnel is trained to provide first aids, including oxygen administration.

To transport exposed workers to medical facilities, the *Accident Investigation Procedure* states that Contrans must carry out the transfer of the affected person by ambulance or in

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any of the units assigned to the risk prevention area accompanied by the social worker assistant.

During the audit, no evidence was found that the facility has alerted local hospitals or other medical facilities of the potential need to treat patients for cyanide exposure. Later, Contrans sent to the auditor a copy of the email sent on April 3, 2020 to Auna Hospital, which is also Contrans contractor for medical services, to jointly manage a plan that ensures the medical care of cyanide exposures to its personnel. Mock drills were conducted periodically in Contrans during the re-certification audit period, at least one per year. The scenarios were cyanide releases accidents. Lessons learned were discussed in the meetings after the mock drills, and established corrective actions and follow-up until closing them.

No additional information was required by the auditor to find this Production Practice in full compliance with the Code.

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Principle 3 – Monitoring:

Production Practice 3.1: Conduct environmental monitoring to confirm that planned or unplanned releases of cyanide do not result in adverse impacts.

The operation is

- ✓ in full compliance with *Production Practice 3.1*
- *in substantial compliance*
- *not in compliance with*

Summarize the basis for this Finding:

The site does not have direct discharges to surface water bodies. For the possible case of floor washing, the cyanide store has a water collection channel that does not connect to any drainage, it goes to a plastic tank. Contrans monitors effluents bi-annually as is required by local regulations, in all cases the results showed undetectable levels of cyanide in effluents.

The site does not have indirect discharges to surface water. Contrans manages packaged solid cyanide, there are no cyanide solutions. Storage is on asphalt surfaces and under a roof. Bi-annually effluents monitoring include tests for cyanide. In all cases the results showed undetectable levels of cyanide in effluents.

Contrans performs bi-annually effluents monitoring include tests for cyanide. In all cases the results showed undetectable levels of cyanide in effluents. No groundwater is monitored as not required by local regulation, due to its activities. For the determination of free cyanide, the method of titration with silver nitrate was used and for WAD cyanide determination, the colorimetric method (picric acid).


No seepage from the facility has been reported to cause cyanide concentration of the groundwater to exceed that necessary to protect its beneficial use. The jurisdiction has designated a beneficial Industrial use for groundwater at the operation area (for cleaning, irrigation of green areas, used in hygienic services, not for direct human consumption).

Contrans limits atmospheric emissions of HCN gas avoiding solid cyanide briquettes contact with water. Cyanide is stored with appropriated measures to avoid moisture. The storing area is on an asphalt carpet, the cyanide warehouse is in a roofed area. Cyanide is received in waterproof containers: sea containers, IBC bags and drums.

Contrans only monitors effluents which include tests for cyanide. They do not monitor surface water or ground water as the facility do not has discharges to surface or ground water.

Bi-annually effluents monitoring is required by local regulations. The auditor considers it is adequate to characterize their effluents considering Contrans is a storage facility; their operations do not generate air emission or wastewater containing cyanide under normal conditions. Waste generated by an emergency would be handled as hazardous waste.

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reviewed the training report from *Safety Management Resources* issued on January 9, 2020, informing they provided Contrans personnel with a set of theoretical and practical tools to allow them to form the criteria and skills for the development of a safe job during the reception, unloading, storage and dispatch of sodium cyanide; as well as clarifying doubts regarding operability, risk management and emergency response with this product. Also stated training was developed considering the Code requirements, hazardous materials, emergency response and safety management requirements.

At Contrans employees are trained before being allowed to work with cyanide. Training includes hazards identification and risk evaluations due to cyanide, among other chemical substances managed in the warehouse. Training effectiveness is evaluated through testing and through observation of on-the-job performance by the Operations Supervisor.

Training effectiveness is evaluated through testing and observation of on-the-job performance by the Operations Supervisor, a qualified person. Test records were reviewed and were found to be complete.

No additional information was required by the auditor to find this Production Practice in full compliance with the Code.

Production Practice 4.2: Train employees to respond to cyanide exposures and releases.

The operation is


- ✓ *in full compliance with* *Production Practice 4.2*
- *in substantial compliance*
- *not in compliance with*

Summarize the basis for this Finding:

Training in procedures to response against cyanide releases could not be verified by training records or interviews with the site workers. They have been trained on HAZMAT but not received specific training on procedures in cases of cyanide releases. After the audit, this requirement was cover in the same training provided by Safety Management Resources on December 3, 2019. The Emergency Response Brigade has been trained to aid workers exposed to cyanide. Contrans emergency response planning require simulation drills in the implementation of the emergency respond to be carried out to test the procedures, equipment, and resources described in the plans, and to train personnel in emergency responses. Drills are planned to be conducted periodically, including cyanide related drills of worker exposure and spill scenarios. The auditor reviewed mock drills briefing notes for cyanide emergency mock drills covering the recertification period.

The drills were evaluated from a training aspect, and improvement opportunities found were addressed. The need for changes to the Contingency Plan was evaluated, but no changes were deemed necessary.

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Training records are retained throughout an individual's employment files and through Contrans Training Program. Records include the name of the employee and the trainer, the date, topics covered, and tests demonstrating understanding.

No additional information was required by the auditor to find this Production Practice in full compliance with the Code.

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Principle 5 – Emergency Response:

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

Production Practice 5.1: Prepare detailed emergency response plans for potential cyanide releases.

The operation is

- ✓ *in full compliance with* *Production Practice 5.1*
- *in substantial compliance*
- *not in compliance with*


Summarize the basis for this Finding:

In occasion of the audit Contrans had an Emergency Response Plan addressing general response actions against accidents with hazardous materials. The Plan did not consider the potential failure scenarios appropriate for its site-specific environmental and operating circumstances, as catastrophic release of hydrogen cyanide, releases during loading or unloading, releases during fires and explosions and equipment failures. Also, the Plan did not describe the specific response actions as appropriate for the anticipated emergency situations, such as evacuating the site personnel and potentially affected neighboring from the area of exposure, the use of cyanide antidotes and first aid measures for cyanide exposures, control of releases at their source, containment, assessment, mitigation and future prevention of releases.

After the audit, Contrans submitted the document SG-N-006 Cyanide Preparedness and Emergency Response Plan version 3, from March 2020, describing specific emergency response procedures to respond to cyanide exposures. This version of the Plan considers the potential failure scenarios appropriate for its site-specific environmental and operating circumstances as required by the Code, describing specific response actions appropriate for evacuating site personnel and potentially affected communities from the area of exposure, also as required by the Code. Once Contrans proceeded to communicate the changes in the procedure to its personnel and presented the training attendance records to the auditor.

No additional information was required by the auditor to find this Production Practice in full compliance with the Code.

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Production Practice 5.2: Involve site personnel and stakeholders in the planning process

The operation is

- ✓ *in full compliance with* *Production Practice 5.2*
- *in substantial compliance*
- *not in compliance with*

Summarize the basis for this Finding:

In occasion of the audit it was not possible to verify that the operation had informed its workers regarding the plan, in the sense of requesting feedback. The same with neighboring companies and entities providing emergency assistance such as firefighters, police and medical assistance. After the audit Contrans presented to the auditor copies of the emails sent by the health and safety supervisor and the integrated management system assistant from March 30 and 27, respectively, asking input to its personnel regarding all these changes required from the cyanide audit, to their cyanide management procedures and to the emergency response plan, as evidence to demonstrate that the operation involves its personnel in planning emergency response.


Although there are no residential and public areas near the facility, the Government of Callao authorities, the Ministry of Transport and Communications, and the local Safety Committee of Oquendo were communicated about the hazardous substances in the warehouse and what communications and response actions are appropriate.

Although the existing emergency response plan involved firefighters, police and hospitals, did not specify which would be the function of these two first response agencies organism on an emergency situation. The plan also did not specify which hospital, with the capacity to care for cyanide victims, would be taken to the poisoned. After the audit Contrans sent proof of having communicated the emergency response plan to local firefighters and police, sending them letters that were listed with the charge received in accordance. The medical facility, *Auna*, is involved with Contrans emergency response plan as provides medical services to the facility. Additionally, Contrans promised to address the issue of cyanide emergency response during its regular meetings of the mutual aid committee between the residents of the area, with the participation of representants from the police and firefighters.

The facility holds monthly meetings with the Safety Committee of Oquendo, to discuss among others, emergencies response actions. The Safety Committee is composed by representants of the surrounding industrial and chemical companies, a commissioned police member, the local firefighter's commander, and ta representant from the Government of Callao.

No additional information was required by the auditor to find this Production Practice in full compliance with the Code.

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Production Practice 5.4: Develop procedures for internal and external emergency notification and reporting.

The operation is

- ✓ *in full compliance with* *Production Practice 5.4*
- *in substantial compliance*
- *not in compliance with*

Summarize the basis for this Finding:

The plan includes a communication protocol including internal communication roles as well as notification to the authorities and external responders. The Plan includes a directory of internal and external contacts.

The plan includes instructions for communication with the authorities, external responders, the Government of Callao and the Safety Committee of Oquendo which represent the surrounding stakeholders. The Plan do not include procedures for communication with the media but includes procedures to communicate the incident to the authorities.

Production Practice 5.5: Incorporate into response plans and remediation measures monitoring elements that account for the additional hazards of using cyanide treatment chemicals.

The operation is

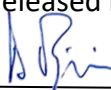
- ✓ *in full compliance with* *Production Practice 5.5*
- *in substantial compliance*
- *not in compliance with*

Summarize the basis for this Finding:

The current plan does not describe specific actions appropriate to remedy and clean up for cyanide accidents.

In occasion of the audit, the current plan did not describe specific actions appropriate to remedy and clean up for cyanide accidents. After the audit Contrans sent the auditor its reviewed Emergency Response Plan which describes remediation measures to recover and neutralize solid sodium cyanide and contaminated solids, including management and disposal of spill clean/up debris. Provision of an alternate drinking water supply is also considered, stating it would not be necessary as works in the facility only drink bottle water. The Plan considers that Contrans and its transporter Meridian will be first responders in case of a cyanide spill. For second response, which will include decontamination of soil or neutralization of cyanide solutions, Contrans will call the specialized contractor Jac Soluciones Ambientales, which will be in charge for retrieving all contaminated material and taking it to a safe landfill for hazardous material managed by contractor Petramas. The plan does prohibit the use of chemicals such as sodium hypochlorite, ferrous sulfate and hydrogen peroxide to treat cyanide that has been released into surface water.

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