

ORION PRODUCTOS INDUSTRIALES, S.A. DE C. V.

Cyanide Code Audit

Summary Audit Report

PROJECT NO. 0233444

JULY 2014

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1. GENERAL SUMMARY

1.1. INFORMATION ON THE AUDITED OPERATION

Name of Cyanide Transportation Facility: Orion Productos Industriales, S.A. de C.V.
Name of Facility Owner: Orion Productos Industriales, S.A. de C.V.
Name of Facility Operator: Orion Productos Industriales, S.A. de C.V.
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Location detail and description of operation:

Orion Productos Industriales, S.A. de C.V. (hereinafter called Orion) is a distributor of sodium cyanide in solid state (briquettes) in Mexico. Currently, Orion supplies several mines in Mexico.

Orion operations involve the reception of solid cyanide in the ICAVE terminal at the Veracruz port. Cyanide ships received at the ICAVE terminal are unloaded using the terminal cranes which place the container on a platform hauled by a truck that can circulate only within the port terminal. Cyanide is then transported by Orion to their cyanide storage facility located at Tizayuca, Hidalgo, México and later shipped to the client. Orion performs transport operations with their own vehicles.

This audit comprises the cyanide reception operations in the ICAVE terminal, transportation from the Veracruz port to the Orion's cyanide distribution center, warehousing operations of the Distribution Center and cyanide transport operations to Mexican mines.

The distribution center operations include storage of 1,000kg- double-bag-lined wooden boxes as received inside the containers coming from the port; each container has 20 wooden boxes or 50 and 85 kg capacity containers that are unloaded in the distribution center facility. Forklifts transport these boxes and containers to the storage area, and load them to the vehicles that dispatched to clients.

OVERALL AUDITOR'S FINDING

This operation is

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

with the International Cyanide Management Code.

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Signature of Lead Auditor

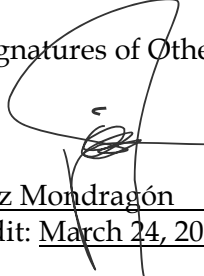
24 March 2014
Date

* For cyanide transportation operations seeking Code certification, the Corrective Action Plan to bring an operation in substantial compliance into full compliance must be enclosed with this Summary Audit Report. The plan must be fully implemented within one year of the date of this audit.

Audit Company: ERM Mexico, S. A. de C. V.

Audit Team Leader: Juan Carlos Rangel Lopez E-mail: juancarlos.rangel@erm.com

Names and Signatures of Other Auditors:



Jaime Martínez Mondragón



Beatriz Valencia

Date(s) of Audit: March 24, 2014

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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2. **ORION AS DISTRIBUTION CENTER**

This operation is

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

with the International Cyanide Management Code

2.1. **OPERATIONS PRACTICE 1. DESIGN, CONSTRUCT AND OPERATE CYANIDE PRODUCTION FACILITIES TO PREVENT RELEASE OF CYANIDE**

2.1.1 **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
- in substantial compliance with Transport Practice 1.1
- not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

Cyanide is stored inside Orion's solid chemicals warehouse and records are maintained about of the construction plans, structural calculations, compatibility of construction materials, and concrete quality certificate of the storage facility. Orion's storage facility was designed and constructed by a qualified architect.

Orion holds the quality control and quality assurance documents for the storage facility which is constructed with concrete floor, concrete block walls, and metal sheet roof. Cyanide is handled within the manufacturer containers, wooden boxes of 1,000 kg and containers of 50 and 85 kg capacity. A power outage or equipment failure would not result in a cyanide release. The storage facility has a secondary containment with capacity to contain up to 200% of the cyanide stored.

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2.2.2 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
- in substantial compliance with Transport Practice 1.2
- not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

Orion has developed and implemented the procedure PGAM-RI22-06, which describes the unloading, loading, and management of Cyanide containers. Relevant personnel were interviewed during the audit and they were knowledgeable of the procedure requirements. This procedure also considers the compatibility analysis of hazardous materials contained in vehicles to authorize the entry of vehicle to the maintenance shop in order to avoid unsafe conditions during maintenance activities.

Orion has developed an Emergency Procedure to respond to Cyanide Emergencies in the Storage Facility which includes emergency response procedures that cover the relevant scenarios for their operations, which include but are not limited to spills and exposure.

Orion has the procedure PGDG-RI11-01 "Development of New Projects and Management of Changes" which establishes how to identify and evaluate hazards associated with new projects or changes required in the Orion's facility as well as controls to avoid or minimize identified hazards. New projects or changes are analyzed by a multidisciplinary team. Analysis results are registered in form FRDG-RI11-03.

Cyanide containers are handled using forklifts which are owned by Orion and the maintenance is provided through the forklifts manufacturer. Preventive maintenance is provided every 200 hours. Orion has a daily checklist where the forklift operation hours are recorded by the operator at the start of the work shift.

Procedure PGAM-RI24-01 establishes the steps to dispose empty containers contaminated with cyanide which state that Orion will use the services of an authorized hazardous wastes disposal vendor, and if necessary, cyanide related wastes will be handled through them.

Cyanide is received in plastic bags within a wooden box and 50 and 85 kg containers which are stored in a roofed area where the height of the walls allows for the storage facility to have adequate ventilation and secure and access is allowed only to authorize personnel. This packaging is compliant with international hazardous materials transport regulations; which are consistent with the respective Mexican regulations. Site personnel inspects storage area and when damaged packaging materials are identified these are replaced on site. Damaged packaging materials are handled as hazardous waste as described in Production Practice 1.2.7.

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

The operation is

- in full compliance
- in substantial compliance Practice 1.3
- not in compliance

Summarize the basis for this Finding/Deficiencies Identified:

There are no tanks, pipes, pumps or valves holding cyanide solutions in Orion facility. However, the cyanide storage area is equipped with secondary containment to collect cyanide dust that can potentially be spilled on the floor. The cyanide storage area is inspected on a monthly basis by personnel responsible of the storage area.

Orion also uses the table of authorized weights and dimensions organized by vehicle type, included in the Mexican Official Standard NOM-012-SCT2-2008, to verify that transport vehicles are not overloading.

2.2. WORK SAFETY: PROTECT WORKER'S HEALTH AND SAFETY FROM EXPOSURE TO CYANIDE

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

The operation is

- in full compliance
- in substantial compliance with Practice 2.1
- not in compliance

Summarize the basis for this Finding/Deficiencies Identified:

Orion has developed the procedure PGAM-RI22-06 that includes the required practices for reception, storage requirements, loading and unloading activities, and personal protective equipment, which was confirmed through interviews with relevant personnel.

Since the facility is dedicated only to storage activities, non-routine and emergency operations correspond only to those included in the emergency response plan. Furthermore maintenance is related only to forklifts, which is performed outside the Orion's facility by the forklifts manufacturer.

Orion has implemented the procedure PGDG-RI11-01 "Development of New Projects and Management of Changes" that includes procedures to identify and evaluate hazards associated with new projects or changes in Orion's facility

Orion developed a format called "Feedback from the cyanide code procedures which is filled annually by workers related to the cyanide management. Filled formats are delivered to the

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Health and Safety department of Orion and recommendations stated by workers are considered in order to update procedures developed by Orion regarding Cyanide Code.

Orion has portable cyanide detectors to monitor cyanide air concentrations while loading and unloading cyanide containers as well as a fixed cyanide detector in the cyanide storage facility that operates constantly. The detectors are calibrated to trigger the alarm at 4.6 ppm.

Detectors are calibrated and a calibration certificate is issued by the manufacturer. The calibration certifications dated 10 and 24 January 2014 were reviewed during the audit.

No areas or activities where workers may be exposed to hydrogen cyanide gas and sodium, calcium or potassium cyanide dust at more than 4.7 parts per million (5 mg/m³) or less exist but class A PPE is maintained at the facility to be used in case a cyanide container is damaged or a cyanide release has to be controlled as well as disposable suits which are used as part of the PPE required at the cyanide storage area.

Radios and telephones are used to communicate among relevant personnel related to the cyanide operations. Signs advising workers that cyanide is present and suitable personal protective equipment must be worn are posted at the cyanide storage area in addition to signs prohibiting personnel from smoking, eating and drinking, and having open flames in areas where there is the potential for cyanide contamination. Disposable suits are used as part of the PPE required at the cyanide storage area.

Pre-employment medical tests are required prior to hiring new personnel and periodically while working at Orion. Health and safety assessment includes: general physical exam, blood studies and drugs test. Relevant documentation was reviewed during the audit related to this point.

2.2.2 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
- in substantial compliance with Production Practice 2.2
- not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The site has a specific written Emergency Procedures to respond to cyanide related emergencies inside and outside of Orion's facilities, which address spills, fires and intoxication due to cyanide exposure.

The site has low pressure eye wash stations and dry chemical powder extinguishers available in the cyanide storage facility which According to the interviewed personnel, are inspected on

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a monthly basis. Emergency showers are located at the facility, their functionality was tested during the audit.

To treat any exposed employee, the facility has an oxygen tank and antidote kit, which according to the procedure PGSG-RI23-01 and the inspection records reviewed, is inspected on a weekly basis. The antidote kits are kept in refrigeration at the temperature range recommended by the manufacturer. The facility has an oxygen tank with a valved mouthpiece and antidote kit to treat any exposed employee. No resuscitators were available and none are considered required due to the availability of the oxygen tank. The employees have radio for internal communication and the facility has telephone services. In addition Orion has identified the nearest hospital that would treat exposed employees, if required.

The employees have radio for internal communication and the facility has telephone services. In addition Orion has identified the nearest hospital that would treat exposed employees, if required and an emergency response brigade trained in first aid and is familiar with cyanide intoxication symptoms on site.

Written communications with external responders were available for review, including the local hospital. Orion has an agreement with the local hospital. This agreement indicates that the hospital will provide medical attention to exposed personnel. The facility conducted a mock emergency drill in March 2014 regarding a worker exposure in accordance with its drill program. Records of the mock emergency drill and its analysis are kept on site.

The Spanish MSDS (Material Safety Data Sheets) was available in the cyanide storage area. Only the first aid brigade is authorized to treat an exposed employee.

The cyanide storage area and each individual box and container are identified regarding the presence of cyanide; there are no tanks, pipes or other vessels and only authorized personnel are allowed to enter in the area. Wearing a disposable Tyvek suit is mandatory to enter the area.

Orion has the Procedure PGSG-RI33-01 incident investigation. This procedure indicates that such incident investigation must be backed up by a report.

2.3. MONITORING: ENSURE THAT PROCESS CONTROLS ARE PROTECTIVE OF THE ENVIRONMENT.

2.3.1 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
- in substantial compliance with Production Practice 3.1
- not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

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Orion 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. This section is not applicable to the facility.

2.4. TRAINING: TRAIN WORKERS AND EMERGENCY RESPONSE PERSONNEL TO MANAGE CYANIDE IN A SAFE AND ENVIRONMENTALLY PROTECTIVE MANNER.

2.4.1 Production Practice 4.1: Train employees to operate the plant in a manner that minimizes the potential for cyanide exposures and releases

The operation is

- in full compliance with
- in substantial compliance with Production Practice 4.1
- not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

Orion has an annual training program that includes all personnel related to cyanide management. New hire employees have to attend 14 training sessions before beginning activities on site. Annual training refresher is provided by Orion to all their employees.

Orion's training program includes topics such as:

1. Cyanide management;
2. Safety management of hazardous materials;
3. Transport and identification of hazardous materials;
4. Use of personal protective equipment;
5. Use of firefighting extinguishers;
6. Safety basic principles; and
7. Emergency response.

Orion has two internal trainers, authorized by the Federal Labor Agency, that provide training to Orion's employees. Authorization granted by the Federal Labor Agency guarantees that internal trainers are qualified to provided training regarding hazardous materials management.

The annual training program (including use of personal protective equipment) is attended by all personnel and the hazard identification is attended to all cyanide operators. Training is provided by the Orion's internal trainers and the EHS department respectively. The EHS department keeps all training records registered and filed.

All training sessions included in the annual training program have been designed as a result of a Hazard Identification and Risk Assessment to address risks associated with the activities of each job at the distribution center.

New hire employees must demonstrate their experience in hazardous materials management before they are contracted by Orion. In addition, a new hire induction training program must be completed by new hire employees prior to the beginning of their activities in the company.

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New hire induction training program include 14 training sessions with a total of 28 hours of training.

The effectiveness of cyanide management training is tested after cyanide management training session provided by the Orion's internal trainers. A written test is applied to employees. Based on the tests results, Orion determines if employees must be retrained in short term.

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

The operation is

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

Summarize the basis for this Finding/Deficiencies Identified:

Orion has an emergency procedure, in which all of the employees are trained in the different scenarios that could result in an emergency such as cyanide release. This training is given by the EHS department once a year. Orion's drill program indicates that a cyanide release drill should be conducted annually.

The first cyanide release emergency drill was performed in March 2014. Besides their emergency response brigade, the administrative and operative personnel of the facility participated during the emergency drill. Orion keeps records of the mock drill performed which were reviewed during audit. According to the interviewed Orion representatives, the mock drill reports will be used to define the contents of the emergency response refresher training.

ERM reviewed training records to confirm the implementation of the training program. These records included the names of the employee, trainer, date of training and topics covered. Three employees were interviewed and answered correctly to all of the questions asked regarding cyanide management in their work area.

2.5. EMERGENCY RESPONSE: PROTECT COMMUNITIES AND THE ENVIRONMENT THROUGH THE DEVELOPMENT OF EMERGENCY RESPONSE STRATEGIES AND CAPABILITIES

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

The operation is

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

Summarize the basis for this Finding/Deficiencies Identified:

Orion has developed an Emergency Procedure to respond to Cyanide Emergencies in the Storage Facility which is a 25-page document that covers all the operations in the distribution center. It includes a section describing the sodium cyanide characteristics, emergency

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assessment and levels and scenario specific instructions. Additionally, Orion has a Civil Protection Plan that includes emergency organization, communications protocol, emergency drills, and emergency response procedures in case of fire and other general scenarios. The Emergency Procedure includes instructions to respond to solid cyanide spills on paved and unpaved ground. Given the nature of site operations, this is considered to be sufficient. The plan includes specific response actions for these scenarios.

The Civil Protection Plan includes instructions to evacuate the facility. The facility is located at an industrial park, and is a member of the Industrial Mutual Aid Committee; through which they would notify other facilities in case their evacuation is required. However, given the nature of the cyanide related operations at the site, it is not expected that evacuation from neighboring areas would be required due to a cyanide incident.

Orion has a procedure that establishes the use of cyanokit in case of intoxication with cyanide and includes scenarios related to releases from wooden boxes and drums.

Orion has an accident investigation procedure that requires identifying the root cause of the accident and establishing preventive and corrective actions to prevent accident repetition. This would help to prevent future releases. As previously noted, the Emergency Procedure also includes specific instructions on how to respond to cyanide spills.

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

The operation is

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

Summarize the basis for this Finding/Deficiencies Identified:

Orion's plan was developed by the facility's EHS Supervisor and reviewed by the Logistics Manager and the General Director. The nearest residential area is located approximately 3 km away from the facility and their Municipal Civil Protection and Firefighters Agency was provided with copies of Orion's Civil Protection Plan.

This Civil Protection Plan is submitted on an annual basis to the Municipal Civil Protection and Firefighters Agency; which visited the facility and validated the Plan in February 2014.

2.5.3 Production Practice 5.3: Designate appropriate personnel and commit necessary equipment and resources for emergency response

The operation is

- in full compliance with
- in substantial compliance with Production Practice 5.3
- not in compliance with

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Summarize the basis for this Finding/Deficiencies Identified:

The Civil Protection Plan includes

- the name of the different members of the emergency committee
- details of their roles and responsibilities
- lists of the members of the emergency brigades including, evacuation, first aid, and firefighting
- the names and 24 hr. contact information for the coordinators and response team members
- an inventory of emergency response equipment
- contact information of external responders
- an annual drills program

Orion has a brigade integrated by specialized internal responders to respond in case of emergency events of hazardous materials, including cyanide releases. Internal responders are trained annually. Both the Emergency Procedure and the Civil Protection Plan identify the responsibilities for the different emergency response team members.

Orion has implemented a monthly inspection checklist to verify the availability of the equipment, which was reviewed during the audit. The Civil Protection Plan and the Emergency Response Procedure establish three levels of emergency response. However, the Job Safety Analysis establishes that the consequences of the incidents will be small and there is no need for external responders in a cyanide related event.

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

The operation is

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

Summarize the basis for this Finding/Deficiencies Identified:

The Civil Protection Plan and the Response Procedure include instructions to notify the authorities as required. The cyanokit use procedure includes instructions on how to notify medical facilities.

The Plan does not consider the evacuation of communities to be necessary; however, instructions for communication with the authorities and external responders are included.

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

The operation is

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

Summarize the basis for this Finding/Deficiencies Identified:

The cyanide storage area has concrete floor; therefore, in case of spill or release, no soil or water remediation measures would be required added to the fact that there are no water bodies within a 1 km from the facility. Monitoring would be limited to air and it will be done with two portable and one fixed cyanide detectors.

2.5.6 Production Practice 5.6: Periodically evaluate response procedures and capabilities and revise then as needed

The operation is

- in full compliance with
- in substantial compliance with Production Practice 5.6
- not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

According to the emergency response procedure developed by Orion, it is reviewed once per year, after that emergency drill is performed. Their annual emergency drills program includes cyanide spills with the latest drill performed in April 2014 involving a cyanide spill inside the cyanide storage facility.

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3. ORION AS TRANSPORTATION COMPANY

3.1. TRANSPORT: TRANSPORT CYANIDE IN A MANNER THAT MINIMIZES THE POTENTIAL FOR ACCIDENTS AND RELEASES

3.1.1 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:

Orion has the written procedure PGAT-RI22-02 dated February 04, 2014 to select routes. Orion's procedure PGAT-RI22-02 establishes that routes are reevaluated annually. However, a route risk reevaluation could be performed before when trucks' operators notify about any change in the routes conditions that should be evaluated.

As part of the procedure, Orion uses the online-service provided by Mexico's Communications and Transport Agency (SCT, Secretaría de Comunicaciones y Transportes) to select routes to transport cyanide. The service provides the highways authorized for the transport of hazardous materials. A route description is prepared by Orion based on the SCT system and Orion's GPS system. Orion personnel verify, on field, the information stated in the route description and identify blackout areas.

Information obtained on field is included in the Orion's GPS system and routes description. Routes description is provided to trucks operators before every shipment.

Orion's procedure considers the following items during the routes selection among others:

- Road description including photographs,
- Populated areas,
- Pitch and grade,
- Prevalence and proximity of water bodies, flood areas, and fog,
- Infrastructure,
- Landslide areas,
- Speed limits,
- Accident statistics,
- Areas in constant maintenance,
- Hospitals,
- Schools,
- Unsafe areas

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Orion uses a risk assessment methodology named "Fine" to evaluate risks of selected cyanide transport routes. This methodology considers three factors: consequences, exposure and probability of occurrence for each risk identified. Measures to control risks identified and risky areas photographs are included in routes assessment developed by Orion.

Orion's risk assessment form to evaluate routes includes measures taken to address risk identified and since convoys are prohibited in Mexico, Orion is not considering the use of escorts for cyanide transportation and also they will not subcontract any of the cyanide handling or transport.

Orion is member of the SETIQ (which provides telephone orientation for chemical emergency response during ground transport) and identifies the brigades from other members with response capabilities in the vicinity of the incident to support the response while Orion's brigade arrives. Orion has notified SETIQ about the routes used to transport cyanide. As part their activities, SETIQ shares this information with local authorities.

3.1.2 Transport Practice 1.2: Ensure that personnel operating cyanide handling and transport equipment can perform their jobs with minimum risk to communities and the environment.

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:

Orion has a procedure for the selection and recruitment of new hire drivers. As part of the mentioned procedure, the candidates have to fulfill the following requirements to be hired:

- To pass a HAZMAT management knowledge exam,
- To hold the driver license granted by the Federal Transport Agency,
- To have eight years of experience transporting HAZMAT, and,
- To pass three psychometric and psychological tests.

Driver license granted by the Federal Transport Agency authorizes the drivers to transport hazardous materials, including cyanide. To obtain the mentioned license, federal regulation requires that the drivers of hazardous materials transport fulfill the following requirements:

- a. Two years of experience transporting hazardous waste and hazardous materials;
- b. Training course provided by the Federal Transport Agency; regarding hazardous waste and hazardous materials transportation; and,
- c. Physical and psychological surveys.

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Once hired, the new drivers must attend a theoretical and practical introductory training (28 hours) that includes, among others, the following topics:

- Hazardous materials management,
- Transport and identification of hazardous materials,
- Firefighting extinguishers use,
- Use and maintenance of personal protective equipment,
- Material Safety Data Sheets,
- Defensive driving,
- Basic safety procedures, and
- Use of the transport emergency guide.

In February 2014, Orion's personnel involved in cyanide management received cyanide safety management training that includes the following topics:

- Sodium cyanide characteristics description,
- Material Safety Data Sheet information,
- PPE required,
- Safety management procedures,
- First aids,
- Risks identification, and
- Safety measures in case of fire or spill.

Orion has an annual training program that is mandatory to all trucks operators and administrative personnel. Orion's training program is taught by two internal trainers that are registered with the Federal Labor Agency.

3.1.3 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:

As previous mentioned Orion receives the loaded ocean container in the Veracruz port which is attached to a truck and transported to Orion's cyanide storage area in Tizayuca, Hidalgo, México. Loads will be verified by Orion in the port, through the custom import permit, before the container is attached to the truck.

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For every shipment, Orion uses the table of authorized weights and dimensions organized by type of vehicle, included in the Mexican Official Standard NOM-012-SCT2-2008, to verify that transport vehicles are not overloading.

In addition, Orion's maintenance department verifies that vehicles mechanical conditions are suitable for the load weight that will transport.

According to the interviewed personnel a detailed inspection is performed to each truck every trip. Additionally, a daily inspection is performed and recorded in the driver's logbook. This inspection includes: brakes, steering system, lights, and tires, among others.

Maximum loads are verified by Orion in ICAVE, through the custom import permit, before the container is attached to the truck. In addition, for each load, Orion determines the type of truck that will be used based on the purchase order and the table of authorized weights and dimensions by organized type of vehicle, included in the Mexican Official Standard NOM-012-SCT2-2008.

The maximum weight of the container received in ICAVE is 24 tons; Orion's trucks exceed this load capacity.

3.1.4 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 1.3
- not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

Orion has the procedure PGAM-RI22-06 "Unloading, loading and management of Cyanide". This procedure describes the safety measures that Orion's employees have to adopt to ensure the integrity of the cyanide containers during unloading, loading and transportation activities.

The transport modality from the port to the Orion's facility consists of transporting an oceanic container which is locked and tagged at the production facility. The lock and tag are removed at the Orion's cyanide storage facility by Orion's personnel.

Before the cyanide containers are loaded to trucks for their transport from the Orion's facility to the mines, they are wrapped. Wooden boxes and containers are secured once loading is concluded. To protect the door block and brace are applied at the Orion's storage facility.

Orion has implemented a procedure for Daily Visual Inspections. Inspections by truck are recorded in the driver's logbook. Visual Inspection includes physical and mechanical conditions of the trucks (i.e. brakes, steering system, lights, and tires, among others). The visual inspection also requires verifying that the placards are posted on the truck. Trucks

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drivers and Orion's Call Center personnel¹ verify that placards are properly posted in accordance with MSDS, prior to each shipment.

The Orion's preventive maintenance program includes three types of maintenances: A) every 25,000 - 30,000 km; B) every 100,000 to 120,000 km; and, C) every 750,000 - 1,000,000 km.

Maintenance programs include: oil and filters change, lights, tires, brakes, lubrication, fluids levels, cleaning, tire inspection, engine inspection and, suspension system inspection, among others.

Orion has an intranet named Infosfera where mileage of each truck is registered by the Call Center personnel after every shipment. Maintenance personnel monitor the mileage report and notify the Call Center personnel when a truck has to receive preventive maintenance. Call Center personnel notify the truck's operator who has to prepare a maintenance order and bring his vehicle to the maintenance workshop located at the Orion facility. If required, Orion has an agreement with Detroit Diesel to provide preventive and corrective maintenance to vehicles that are away from the workshop. In addition, every six months the mechanical and physical conditions of the Orion's vehicles are inspected by an accredited third party company.

Orion has a trucks spare parts warehouse that is available 24 hours/ 365 days in case maintenance personnel require spares to provide preventive or corrective maintenance.

If corrective maintenance is required during road transportation, Orion owns vehicles that transport technicians and spare parts to the area where the trucks are located.

Orion keeps records of the corrective and preventive maintenance activities performed on each truck.

Orion's procedure PGAU-RI22-14 establishes that the maximum journey is 5 hours driving per 1.5 hour of rest if cyanide is transported. Maximum journey per day is 9 hours driving.

Call Center personnel maintain permanent monitoring of the reports issued by the National Weather Service (SMN, Servicio Meteorológico Nacional), SCT and national and local news agencies to determinate if any road shipment must be suspended due to severe weather or civil unrest.

Call Center personnel notify the drivers on route by mobile phone and GPRS system if they have to suspend cyanide transportation as well as when there are favorable conditions to restart transportation. Besides, available alternative routes are also notified by the Call Center personnel.

¹ Orion's Call Center is the area in charge to monitor vehicles during transportation, maintain constant communication with drivers and verify the vehicles compliance with Orion's transportation requirements, among others.

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In case of civil unrest, the conflict area is identified in the Orion's GPS system, so trucks operators and the Call Center personnel can verify the truck's proximity to the conflict zone.

Orion has implemented an alcohol and drugs prevention program. Potential new employees are tested prior to their hiring. Additionally, random drugs tests are performed semiannually. Orion keeps, at least, three years of records documenting that the Cyanide Code activities have been conducted.

3.1.5 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:

As described in Section 1, the scope of this audit was from the moment the ship delivers the cyanide at the Mexican port and its ground transport to the distribution center and mines in Mexico; therefore, this practice does not apply.

3.1.6 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 the trucks are equipped with GPS and GPRS systems that are monitored in real time from the Orion facility by the Call Center personnel and drivers have mobile phones.

GPS is monitored constantly, and errors can be identified immediately at the control panel. Drivers are responsible for reviewing the functionality of the cellular phones.

Blackout areas have been identified by Orion. Blackout areas have been included in the Orion's GPS systems. Orion has a procedure for transit through blackout areas that includes the following activities:

- The driver calls the Call Center prior to entering the blackout area and informs them about the estimated time to cross the area.
- Call Center notifies the drivers before they enter a blackout area.

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Orion has implemented a GPS system to monitor the progress of the trucks. Orion's Call Center is the area in charge of identifying any delays or deviations and issue internal notifications to alert the customer. Customer is alerted through the shipments area.

Orion has implemented controls to prevent loss of cyanide during shipment. Orion maintains a cyanide inventory. Each time a cyanide shipment arrives at the Orion's storage area, the following information is included in the Orion's inventory: purchase number order, date of entry to the Orion's cyanide storage facility, type of container (boxes or containers) and, shipment weight. Every box or container is assigned a batch number. Then, for each shipment that Orion transports to mines, the following information is captured in their inventory: client's name, amount of cyanide transported, delivery date, order number and remaining amount in stock.

Orion also keeps the transport document (documento de embarque) required by the Mexican regulations. Transport document includes information of the truck, the net load, and the consignee. Trucks are tagged to prevent losses during the transport operations. Finally, the GPS system will notify Orion if unauthorized stops take place or unauthorized routes are used by drivers.

The availability, of each truck, of the transport document and MSDS is verified prior to the trucks departure and Orion tracks cyanide shipments to prevent losses during transport.

3.2. *INTERIM STORAGE: DESIGN, CONSTRUCT AND OPERATE CYANIDE TRANS-SHIPPING DEPOTS AND INTERIM STORAGE SITES TO PREVENT RELEASES AND EXPOSURES.*

3.2.1 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:

Orion does not operate interim storage facilities therefore this Practice does not apply.

3.3. *EMERGENCY RESPONSE: PROTECT COMMUNITIES AND THE ENVIRONMENT THROUGH THE DEVELOPMENT OF EMERGENCY RESPONSE STRATEGIES AND CAPABILITIES*

3.3.1 Transport Practice 3.1: Prepare detailed emergency response plans for potential cyanide releases.

The operation is

- in full compliance with
- in substantial compliance with Transport Practice 3.1
- not in compliance with

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Summarize the basis for this Finding/Deficiencies Identified:

Orion has implemented Procedure for General Emergency during Cyanide Transport (Edition 1, dated 5 January 2014). It is a 25 pages document which establishes the roles description for the emergency brigades, the notification chain, the phone directory for external emergency response services and the manufacturers (Annex 9); and the cyanide MSDS. It includes instructions on how to respond to scenarios for ground transport of cyanide in solid state. The scenarios include spill on asphalted ground, on non-asphalted ground, on water body, spill during raining events and on wet ground. The scenario-specific instructions included in the Emergency Procedure, consider the solid state of the cyanide.

The Emergency Procedure includes three derived annexes (one per route) instructions for thirteen scenarios related to cyanide in solid state transported by truck that describe the most likely emergency scenarios in each route based on the route assessments. It also includes instructions for different scenarios, these relate to the transport of cyanide in wooden boxes and drums. The procedure indicates that the consequences could be greater in events with dry boxes versus ocean containers and includes a detailed description of the roles of outside responders including SETIQ, police, civil protection and fire department.

3.3.2 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:

Orion has trained personnel to respond in case of emergency with HAZMAT. Training records of the members of the emergency response brigades were reviewed during audit.

The Emergency Procedure establishes the responsibilities for the members of the response team (communication brigade, decontamination brigade, logistics manager, traffic controller, and other internal roles during the emergency).

Orion has defined the following as the minimum required emergency response equipment that must be available at their main base and two support bases.

Equipment	Pieces
Jars	2
Canvas	2
Water drum	1
Drum of sodium hypochlorite 5%	1
Brushes	2
Megaphone	1

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Equipment	Pieces
Small containers	2
Plastic buckets	2
Plastic shovels	2
Plastic container	1
Emergency strap	1
Emergency signals	4
Picks	3
Shovels	3
Oxygen	1 tank
Hydrocyanic acid detector	2
Brooms	2
Water of 250 ml	1 pack
Spill kit	2
Super sacks	5
Cyanokit	1
SCBA	1
Full face masks	7
Masks cartridges	14
Neoprene gloves	14
Rubber boots	15
Tychem	16
Tyvek for chemicals level B with SCBA	1
Tyvek for chemicals level A with SCBA	1
Googles	16
Reflective vests	10

The Emergency Procedure establishes that the drivers carry their personal protection equipment and that they are to call the base in case of emergency. Orion has three bases (the main and two support bases) where they store the emergency response equipment.

The availability of this equipment was confirmed at the main base during the audit. Orion has also has an online inventory system where the availability of the emergency response equipment is controlled by the central base and updated by the bases personnel. Emergency response equipment is inspected on a monthly basis. Additionally, the online inventory system identifies materials that require replacement.

3.3.3 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

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The Emergency Procedure includes the instructions for initial communication and the responsibility for the communications brigade to identify additional resources and agencies that have to be contacted. There is directory of internal personnel and external responders. A sample of the numbers was dialed and confirmed to be accurate.

The Emergency Procedure, which includes the internal and external notification and reporting instructions, states that it has to be reviewed entirely at least on an annual basis

3.3.5 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 Emergency Procedure includes instructions to collect solids (e.g. cyanide debris, soil, etc.) and neutralization solutions (e.g. using absorbing materials) and to dispose of them as hazardous waste.

Orion's emergency procedure establishes that no chemicals can be used to neutralize cyanide that has been releases into surface water.

3.3.5 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:

As previously noted, the Emergency Procedure establishes that it must be reviewed on an annual basis and after mock drills. Mock drills are performed on an annual basis and latest emergency drill was performed in March 2014 and consisted in the spill of cyanide on wet ground.

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4. *PORT DUE DILIGENCE - ICAVE TERMINAL*

Orion receives sodium cyanide at the ICAVE terminal at the Veracruz port. Cyanide is owned by the consigner until it is received by Orion at the Veracruz port. The ship is unloaded using the terminal cranes which place the container in a platform hauled by a truck owned and maintained by ICAVE that can circulate only within the port terminal. As chain of custody, ICAVE receives the ocean container number and Orion's data.

Hazardous substances are handled by ICAVE in accordance with the International Maritime Dangerous Goods Code (IMDG Code). IMDG code includes an incompatibility matrix that is used by ICAVE operators to determine the area where ocean containers can be stored. The maximum stacking height is of five containers. In case the container does not have the four placards with the UN number, the terminal can place labels in the containers. There is a computer system to control the movement and location of the container while it is located in the terminal.

According to the interviewed personnel all personnel have been instructed to not open the containers.

Once the ocean container is temporally stored at the port and released by the customs authority, ICAVE authorizes an Orion's truck to pick up the ocean container. Ocean container is placed in the Orion's truck using a crane operated by ICAVE. Cyanide is transported by Orion to its cyanide storage facility located at Tizayuca, Hidalgo, Mexico.

ICAVE is certified under ISO-9000, ISO14001, PIP and CTPAT standards. ICAVE personnel have received an introductory training to handle hazardous materials. ICAVE has an annual training program that must be attended by their personnel. Training is provided by a third party company. In addition, ICAVE is enrolled in PROCADIST, a distance education program controlled by the Federal Labor Agency.

Training provided by ICAVE includes among others, the following topics:

- ICAVE operations
- Occupational health and safety
- Safety regulation
- HAZMAT course (five hours)
- PIP code
- First aids
- Defensive driving
- Operation of forklifts, loading and unloading equipment

The cranes used in the dock have a maximum load capacity from 40 to 60 tons, the patio cranes have a load capacity of 40.6 tons. In addition ICAVE has small trucks (tracto plana) that operate only within the port terminal; these types of trucks can haul a container of up to 35 to 60 tons. Equipment is inspected prior to starting each shift using an equipment specific

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checklist. Records are kept by the Equipment Control department. If issues are identified during inspection, the equipment is not used.

According to ICAVE's container loading/unloading procedure most operations are related to a single container, only the dock crane has the capacity to manage two containers simultaneously. All other equipment can manage one container at the time.

The preventive maintenance program is based on failures relevance (impact on operations, cost, safety, and environment). Safety and the frequency of the failures are the highest weight. The preventive maintenance program was implemented in 2013. The relevance was assigned by a committee formed by the leadership of different departments. The frequency for the maintenance operations is defined based on operation hours. The frequency of the maintenance routines has been uploaded in software which generates automatic work orders. The cranes have an odometer (for operation hours) which is updated weekly to the software and then the work orders are generated automatically and the maintenance operations are coordinated with the operations personnel. Compliance with the work orders are also recorded in the software.

Preventive and corrective maintenance records are held for four months in paper. Training records are kept for one year.

Small trucks operators can work double shifts only when both shifts are with daylight time. Crane operators cannot work double shifts. Dock crane operators can only work four continuous hours.

ICAVE has an internal safety regulation that includes an alcohol and drugs policy, they implement random drugs test (urine test) and alcohol in breath tests during holiday seasons, or when there is an accident (e.g. collision), according to the medical personnel they keep records; however, records were not available for review as they are regarded as confidential information. This policy was established in 2012 and includes the removal of the employee if the test results positive. This policy and the random test are applicable to contractors and truck operators.

When the wind speeds exceeds 38 miles per hour the terminal completely stops operations. Some operations are suspended at lower wind speeds.

ICAVE has an emergency response plan dated January 2014, it is a 121 pages document, it has a track changes for updates and reviews; which are performed at least once a year. They have an internal brigade for hazardous materials that consists of 97 trained members. There are two areas with secondary containment where leaking container are placed. The emergency response plan requires having the MSDS of the materials available and use the UN Emergency Response Guidance to attend the emergency and has emergency response kits for acids and alkaline substances.

Orion provided training to ICAVE personnel on cyanide handling and emergency response on March 2014. Based on the observed emergency response capabilities, maintenance and

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training programs implemented by ICARE, it is concluded that no additional actions are required from Orion.

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