

## CORRECTIVE ACTION PLAN FINAL COMPLETION REPORT

### Mur Wy S.A.C.

The sections below detail the corrective actions agreed by Mur Wy S.A.C. (Mur Wy) cyanide truck transport operation in Peru and the Lead Auditor Bruno Pizzorni, necessary to bring Mur Wy into Full Compliance with the International Cyanide Management Code (Cyanide Code), as indicated in Mur Wy Audit Reports and required in the Corrective Action Plan submitted to the International Cyanide Management Institute (ICMI).

The site audit was performed on October 14 and 15, 2020 in accordance with the Cyanide Transportation Verification Protocol For The International Cyanide Management Code, December 2016 version. The transporter was found in Substantial Compliance and a Corrective Action Plan (CAP) was submitted to the ICMI, along with the Audit Reports, requiring the CAP must be fully implemented to bring this operation into Full Compliance.

The carrier was impacted by the COVID-19 pandemic, causing delays in taking actions to comply with the CAP. The required actions were followed-up and validated by the Lead Auditor through remote review of documents and conference calls.

#### ***Transport Practice 1.1***

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

***1.1.1. Does the transporter implement a process or procedure for selecting transport routes that minimizes the potential for accidents and releases or the potential impacts of accidents and releases?***

***If so, does the process or procedure consider:***

- a) Population density***
- b) Infrastructure (roadway, rail, port, runway, helipad) construction and condition***
- c) Pitch and grade***
- d) Prevalence and proximity of water bodies and fog?***

#### ***Deficiencies***

Prevalence areas of fog conditions were not considered in Mur Wy's routes assessments. The required to include in the procedure for selecting transport routes, to identify areas with prevalence and proximity of fog, transporter was as required in item d) of this Protocol Question.

#### ***Corrective Actions***

The carrier submitted its updated procedure *Land Transport Route Control P-TRA-03*, which included within the guidelines for correct control and evaluation of the route to which the transporter provides services, the requirement to evaluate the areas with prevalence of fog, in addition to the requirements of this Protocol Question. Also presented the updated route evaluation *Route Study for Transportation of Sodium Cyanide Cargo from Callao Port to Apumayo Mine and to Anama Mine* taking into account the



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areas of the route with prevalence and presences of fog, establishing the necessary control measures such as morning circulation schedules since in the afternoons there is a greater prevalence of fog in those areas.

***1.1.4. Does the transporter document the measures taken to address risks identified with the selected routes?***

***Deficiencies***

The routes reports evaluations reviewed have the same control measures along all the documents. The transporter was required to identify and document the specific control measures taken to address the particular risks identified along the routes.

***Corrective Actions***

Mur Wy established in the procedure Land Transport Route Control that specific measures must be identified for correct route control in order to avoid avoiding or minimizing the occurrence of accidents when driving, operating vehicles and/or transport equipment. In the updated route evaluation for Apumayo and to Anama mines, the necessary control measures are documented along the route.

Road characteristic's as sharp curves, areas near to waterbodies and high density population are having special precautions to transit through. Route evaluations were complete and records were available for review. Routes are also evaluated for security issues and for cell phone coverage.

***1.1.5. Does the transporter seek input from communities, other stakeholders and applicable governmental agencies as necessary in the selection of routes and development of risk management measures?***

***Deficiencies***

No records could be found to demonstrate the transporter has managed to seek input from communities and other stakeholders during the routes evaluations. Mur Wy was required to document, as far as possible, information and/or communications with the client, or with communities, or any proof that the transported interacted with other stakeholders or governmental agencies as necessary in the selection of routes and development of risk management measures.

***Corrective Actions***

The transporter sent records to show that during the updated assessments performed through the routes to the mine sites, input has been requested to different actors along the route. Mur Wy interacted with governmental agencies and emergency responders in the development of risk management measures. Mur Wy has the authorization of the Ministry of Transport and Communications of Peru (MTC) to use the routes that currently runs to the different mining operations and as such, the authorities had reviewed routes assessments.

Interaction with the communities is in charge of the mining operations as is a sensible issue, according to their request. The auditor reviewed meeting minutes between Mur Wy and the mines to share incidents, learned lessons, and action plans. Also reviewed the resolution of the Ministry of Transport that approves the different transportation routes.



***1.1.7. Has the transporter advised external responders, medical facilities and communities of their roles and/or mutual aid during an emergency response?***

***Deficiencies***

There was no evidence that the carrier has informed outside first responders, medical facilities and communities (if the case) about their roles and / or mutual aid during an emergency response. Mur Wy was required to maintain records documenting has informed at least, outside first responders and medical facilities of their roles and/or mutual aid during an emergency response.

***Corrective Actions***

Mur Wy submitted evidence of communications to hospitals and firefighters in Lima. Letters sent to firefighters and medical centers were reviewed to communicate their roles in case of any emergency and to open communication channels.

***Transport Practice 1.3***

***Ensure that personnel operating cyanide handling and transport equipment can perform their jobs with minimum risk to communities and the environment.***

***2. Are there procedures to verify the adequacy of the equipment for the load it must bear?***

***Deficiencies***

The transporter did not showed evidence of inspections or testing the vehicles to identify signs of stress or overloading. Mur Wy was required to keep inspections and maintenance records of its activities related to identify signs of stress or overloading of its vehicles. The transporter was asked to gather evidence such as completed inspection records in evaluating compliance with this provision.

***Corrective Actions***

Mur Wy submitted inspection and maintenance records for the last six months to ensure the capacity of the equipment is adequate and to identify signs of stress or overload, according to the new version of the procedure Cyanide Transport Management, which states the required controls to assign and verify the adequate vehicle for the load it must bear. With this purpose, it uses a routine preventive maintenance inspection program with defined checklists showing all necessary maintenance activities. Inspections are scheduled, tracked and documented. Each tractor and trailer has its own file that is maintained. The file shows all preventive maintenance activities, repair activities, and inspection activities that were performed on the truck and/or trailer over time.

Prior to loading and use, trucks are inspected, results are logged in the P-TRA-01-08 Cargo Vehicle Inspection form. The vehicles and the shipment to be transported are visually inspected by the Trip Coordinator and the drivers before starting the march to their destination, verifying in addition to the vehicle, the state of the lashing and the packaging.

Mur Wy is responsible to verify the adequacy of the equipment for the load it must bear according to their procedure Cyanide Transportation Management P-TRA-02, performing inspections regularly before departing the cyanide convoy. Mur Wy Health & Safety (H&S) Supervisor and the escort driver are present



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to ensure the transporter operates according to recognized H&S standards. The auditor reviewed documentation of the inspections.

***3. Are there procedures in place to prevent overloading of the transport vehicle being used for handling cyanide (i.e., overloading a truck, ferry, barge, etc.)?***

***Deficiencies***

The transporter did not show support evidence to demonstrate that the procedure achieves this goal. Mur Wy should have a procedure or flow sheet or similar to ensure they are controlling overloading of trucks. Document records to demonstrate how the transporter is preventing overloading of the trucks.

***Corrective Actions***

The new version of the procedure Cyanide Transportation Management details in Section 5.1 (05) the necessary steps to prevent overloading the transport vehicle. Mur Wy transports standard loads of sodium cyanide in 20 foot sea maintainers with an average weight of 22 tons. The Operations Coordinator plans the operation once informed of the cyanide shipment to be transported and assigns the transport unit in accordance with the authorized weights and measures tables and the state of maintenance of the vehicle all recorded in the form F-TRA-01-02 Operation Detail Sheet. The auditor reviewed completed Operation Detail Sheets for the last 6 months, finding it in compliance.

***Transport Practice 1.4***

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

***1. Are there procedures to ensure that the cyanide is transported in a manner that maintains the integrity of the producer's packaging?***

***Deficiencies***

During the audit it was not found procedures to ensure that the cyanide is transported in a manner to ensure the integrity of the cargo. The transporter should have handling and inspection procedures as necessary to ensure that the integrity of cyanide packaging is maintained during loading and shipment. Mur Wy was required to develop and implement instructions/ procedures necessary to ensure that the integrity of cyanide packaging is maintained during loading and shipment and to how inspection records showing controls for the cargo.

***Corrective Actions***

The reviewed version of the procedure Stowage and Loading of Merchandise details procedures for cyanide load and unload as well for cyanide transportation for its safety operation. Mur Wy drivers and escort leader perform pre-trip inspections to ensure that trailers are locked and secured and that placards are on all four sides of the trailers. The procedure describes the administrative, operational and safety measures for the proper transportation of sodium cyanide. The procedure establishes that the load cannot be altered during the transportation process. Tags are placed in the sea container's locks at the manufacturing facility. These tags can only be removed at the mine. Inspections to the cargo is performed before resuming the journey. The auditor reviewed the procedure and completed inspections to cargo registered on the P-TRA-01-08 Cargo Vehicle Inspection forms, finding Mur Wy in compliance.



**Transport Practice 3.2****Designate appropriate response personnel and commit necessary resources for emergency response****1. Does the transporter provide emergency response training of appropriate personnel?****Deficiencies**

During interviews with personnel involved in the cyanide transport operation, not enough knowledge was shown on how to respond to cyanide emergencies. No training records were found covering the recertification period. Mur Wy was required to provide refreshment training for its personnel with designated responsibility to respond to emergencies during cyanide transportation. The training must address all planned response activities, such as asking for assistance, the use of personal protective equipment, first aid against cyanide exposure and measures to stop the flow of cyanide from the transport vehicle. The elements of this training must be documented in training materials, and records to be kept.

**Corrective Actions**

Mur Wy submitted the following training records corresponding to the recertification period:

- Safety Measures for Cyanide Transportation, four hours, dated May 22, 2019 with 24 participants, provided by external contractor ESSAC.
- Hazardous Materials (HAZMAT) I and II, eight hours each, in October 16 to 17, 2018 to 3 escort leaders, provided by external contractor IFSEC
- Defensive Driving, four hours, on October 11, 2018, with 21 participants, provided by IFSEC.

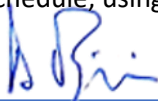
On October 2021, after the audit, the transporter provided refreshment training in emergency to drivers, convoy leaders and supervisors. Training included appropriate emergency response in safe cyanide management (spill and intoxication), firefighting, first aid, hazardous materials. Training was provided by internal staff complying with the training plan and verifying compliance with specific skills. The auditor reviewed several training records in hard copies, which include the persons trained, the nature and dates of the training.

**6. Are there procedures to inspect emergency response equipment and assure its availability when required?****Deficiencies**

No indications were found specifying inspections of emergency equipment. Mur Wy was required to establish guidelines for inspection of cyanide-related emergency equipment, including checklist formats, frequency, and display records of inspections performed. Also to state who should be responsible for the inspections, and how often. The transporter was also required to provide guidelines for inspection of the emergency equipment and to provide inspections records according to the established frequency.

**Corrective Actions**

Mur Way submitted a new version of its emergency response plan (ERP): *Contingency Plan for Sodium Cyanide Ground Transportation 2022*, dated March 31, 2022. Section 7.4 Emergency Equipment Inspection Program, requires that all emergency equipment must be checked before the start of each cyanide transport service and is carried out by the supervisor in charge, in addition to carrying out the monthly inspection according to the established schedule, using the following formats:



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- F-TRA-01-10 Cyanide Emergency Kit Control.
- F-TRA-01-14 Inspection of First Aid Kits.
- F-TRA-01-15 Fire Extinguisher Inspection.

The auditor reviewed completed inspection forms for the last 6 months verifying that the operation is inspecting the emergency response equipment as established in the procedure.

### ***Transport Practice 3.3***

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

***2. Are systems in place to ensure that internal and external emergency notification and reporting procedures are kept current?***

#### ***Deficiencies***

No provisions were found to keep internal and external emergency notification information up-to-date. The Code requires provisions to be included on how and how often emergency contacts and procedures will be updated. Mur Wy was required to provide these provisions.

#### ***Corrective Actions***

The last version of the ERP includes in Section 9 *Review and Update of the Contingency Plan*, provisions in place to ensure that internal and external emergency notification and reporting procedures are kept current. For the review and update of the ERP, the H&S Supervisor of the transport area, along with the HAZMAT Transport Coordinator will meet. Among others, Section 9 states the procedure to review and update of the contact numbers of persons or institutions to whom the emergency must be communicated. It will be carried out twice a year in the months of June and December by a representative of the H&S area and a HAZMAT transport supervisor, who will contact the telephone numbers described in this contingency plan to verify their validity. At the end of the verification, a report will be issued mentioning the telephone numbers that do not coincide with the person or institution described in this Contingency Plan, to proceed with the updating of the observed telephone numbers. The auditor reviewed the last version of the ERP which includes the telephone contact list for internal and external emergency notification updated according to the procedure, finding it in conformance.

***3. Is there a procedure to evaluate the Plan's performance after its implementation and revise it as needed, and have they been implemented?***

#### ***Deficiencies***

In occasion of the audit, no procedures were found to review and evaluate the ERP after any incident that results in its implementation. Mur Wy was required to include such provisions in the emergency planning.

#### ***Corrective Actions***

The last version of the ERP includes in Section 9 *Review and Update of the Contingency Plan*, which states the review and update will be carried out annually or when the following circumstances arise:

- Changes in the Organization of the company.
- Modification of current operations or start of new operations.



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- Change of the address or telephone numbers of the authorities or institutions that must be communicated in case of an emergency.
- Experiences collected from other companies, new technologies and others.
- After the occurrence of incidents or emergency situations.
- After the opportunities for improvement detected in the evaluations of the drills.

Such review has not been done as during this recertification period no incident occurred needing to activate the ERP.

