Location detail and description of operation:

Overview

PTTC Inbound shipments of cyanide containers consists of two supply chains for two mines sites as follows:

1. **PT J Resources Bolaang Mongondow Bakan (JRBMB)**

   PTTC transportation supply chain starting from PT Terminal Petikemas Surabaya (TPS), thereafter these containers are being transported by Hacaca (Subcontractor) to Surabaya Tanjong Perak Domestic seaport; followed by loading onboard TANTO commercial vessel for sea transportation to Port of BITUNG. Upon arrival at Bitung; these containers will be stored at Dangerous Goods yard located within Port of Bitung, land transportation for delivery to JRBM in Bakan North Sulawesi by PTTC own transportation and drivers.

2. **PT Sago Prima (JResources Group) SPP**

   PTTC transportation supply chain starting from PT Terminal Petikemas Surabaya (TPS), thereafter these containers are being transported by Hacaca (Subcontractor) to Surabaya Tanjong Perak Domestic seaport; followed by loading onboard Salam Pacific International Line (SPIL) commercial vessel for sea transportation to Port of Tarakan; these containers will be stored at SPIL container yard located within Port of Tarakan, outsourced LCT/Barge along Seruyung River, operated by PT. Lautan Jaya Utama and land transportation from Seruyung Jetty to mine site (Northern Kalimantan) by PTTC own transportation and drivers.
SUMMARY AUDIT REPORT

Auditor's Finding

This operation is

☑ in full compliance

☐ in substantial compliance *(see below)

☐ not in compliance

with the International Cyanide Management Code.

Scope of Verification Audit

1. **PT J Resources Bolaang Mongondow Bakan (JRBM)**

   PTTC transportation supply chain starting from PT Terminal Petikemas Surabaya (TPS), thereafter these containers are being transported by Hacaca (Subcontractor) to Surabaya Tanjong Perak Domestic seaport; followed by loading onboard TANTO commercial vessel for sea transportation to Port of BITUNG. Upon arrival at Bitung; these containers will be stored at Dangerous Goods yard located within Port of Bitung, land transportation for delivery to JRBM in Bakan North Sulawesi by PTTC own transportation and drivers.

2. **PT Sago Prima (JResources Group) SPP**

   PTTC transportation supply chain starting from PT Terminal Petikemas Surabaya (TPS), thereafter these containers are being transported by Hacaca (Subcontractor) to Surabaya Tanjong Perak Domestic seaport; followed by loading onboard Salam Pacific International Line (SPIL) commercial vessel for sea transportation to Port of Tarakan; these containers will be stored at SPIL container yard located within Port of Tarakan, outsourced LCT/Barge along Seruyung River, operated by PT. Lautan Jaya Utama and land transportation from Seruyung Jetty to mine site (Northern Kalimantan) by PTTC own transportation and drivers.

Audit Company: Danny Tan

Audit Team Leader and Technical Expert: Mr Danny Tan

E-mail: dannytan163@yahoo.com.sg

Names and Signatures of Other Auditors:

Date(s) of Audit: Audit Dates: 18 to 20 Aug 2017
SUMMARY AUDIT REPORT

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

☐ in full compliance with

The operation is ☐ in substantial compliance with Transport Practice 1.1

☐ not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

Land transport from Bitung to JRBM in Bakan North Sulawesi and Seruyung to SPP

PTTC conducted a comprehensive route assessment for both Bitung and Seruyung. Based on documented information and on site verification, selection of route were based on the minimizing the potential accidents and releases or the potential impacts of accidents with due consideration given for the following:

a) traffic conditions,

a) road conditions,

b) environmental impacts

c) community relations and reactions

d) daily commuting habits

Based on the route selected, PTTC conducted a Route Risk Assessment covering

a) Population Density

b) Infrastructure construction and condition

c) Pitch and grading

d) Prevalance and proximity of water bodies and fog

PTTC implemented a process and written document (P233 – Cyanide Route Risk Assessment Bitung Port to JRBM). These procedures address the evaluation of risks in the selection of the cyanide transportation routes with appropriate risk management controls. A process on collecting feedback on route condition from the PTTC drivers were verified in accordance with implemented road transport procedure (P209). Community consultation from local police, port authorities and village chiefs for Bitung route to JRBM was conducted as part of the route assessment.

Local police escorts and own transporters played the critical roles as both external and internal responders in notifying respective medical facilities and communities’ communications during an emergency or in the event of safety and security incidents. This arrangement enhances the integrated respond and alertness required which demonstrated during audit interviews.

Name of Facility: PTTC

Signature of Lead Auditor

Date

& Technical Expert

3rd Jan 2018
Sea Transportation (TPS to Bitung domestic seaport)
PTTC subcontracts TANTO commercial vessel for sea transportation from TPS to Port of Bitung. There are no known regulations pertaining to sea transportation of cyanide products but SOLAS regulations for safe sea passage is applicable.

Sea Transportation (TPS to Port Tarkan domestic seaport)
PTTC subcontracts SPIL commercial vessel for sea transportation from TPS to Port of Tarakan. There is no known regulations pertaining to sea transportation of cyanide products but SOLAS regulations for safe sea passage is applicable.

Sea Transportation (Port of Tarakan domestic seaport to SPP mine site)
PTTC subcontracts sea transportation from Port of Tarakan to Seruyung via PT. Lautan Jaya Utama. There are no known regulations pertaining to sea transportation of cyanide products but SOLAS regulations for safe sea passage is applicable. Thereafter, land transportation from Seruyung Jetty to mine site (Northern Kalimantan) by PTTC own transportation and drivers.

Land Transportation from TPS to Surabaya Tanjong Perak Domestic seaport
Since Dec 2017, PTTC do not subcontract any of the cyanide handling or transport and had utilised own vehicles and own drivers for transportation of cyanide. Documented information on cyanide transportation by PTTC vehicles were reviewed with supporting information on delivery notes dated 4 Dec 2017, bill of lading and commercial invoices. Route risk assessment was conducted in accordance with P234 – Cyanide Route Risk Assessment – Surabaya International to Domestic Port for land transportation between TPS to Surabaya Tanjong Perak Domestic seaport within the port limits to ascertain the required control measures.
SUMMARY AUDIT REPORT

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.

☒ in full compliance with

☐ in substantial compliance with Transport Practice 1.2

☐ not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

Land transport from Bitung to JRBM in Bakan North Sulawesi and Seruyung to SPP

PTTC F102 HSEC Matrix (Training) spelt out the qualifications and internal training that is required for each employee. Copies of current licences, such as driving and forklift, are to be kept on file and records of internal training are reviewed. Refresher training is being implemented to ensure personnel are familiar with work requirements and emergency situations. Training records and appropriate materials were reviewed to ascertain the relevancy and applications. Interviews held with trainer and designated drivers are evident that drivers are trained in this aspect.

Sea Transportation (TPS to Bitung domestic seaport)

PTTC subcontracts TANTO commercial vessel for sea transportation from TPS to Port of Bitung. Interview held with TANTO operations staff verified that assigned sea crews were trained on the specifics of cyanide handling and transportation. Training records and appropriate materials were reviewed to ascertain the relevancy and applications. PTTC had implemented due diligence procedure (P205) to ensure that subcontractors continue to make compliance with ICMC requirements. Due diligence investigations’ records conducted were verified and no significant lapses were noted.

Sea Transportation (Port Tarkan domestic seaport to Seruyung)

PTTC subcontracts sea transportation from Port of Tarakan to Seruyung via PT. Lautan Jaya Utama. Interview held with PT. Lautan Jaya Utama operations staff verified that assigned sea crews were trained on the specifics of cyanide handling and transportation.

Due diligence investigation for TANTO and LCT operator PT Lautan Jaya Utama was conducted on 22 Jul 2017 and 8 Aug 2017 respectively. It was conclusive that both TANTO and LCT operator PT Lautan Jaya Utama had in place appropriate measures for safe sea transportation of cyanide.

Training records and appropriate materials were reviewed to ascertain the relevancy and applications. PTTC had implemented due diligence procedure (P205) to ensure that subcontractors continue to make compliance with ICMC requirements.

Land Transportation from TPS to Surabaya Tanjong Perak Domestic seaport

Since Dec 2017, PTTC do not subcontract any of the cyanide handling or transport and had utilised own vehicles and own drivers for transportation of cyanide. Documented information on cyanide transportation by PTTC vehicles were reviewed with supporting information on delivery notes dated 4 Dec 2017, bill of lading and commercial invoices.

Name of Facility: PTTC Signature of Lead Auditor Date
& Technical Expert 3rd Jan 2018
SUMMARY AUDIT REPORT

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

☑ in full compliance with

☐ in substantial compliance with ☐ not in compliance with

*Transport Practice 1.3*

Summarize the basis for this Finding/Deficiencies Identified:

**Land transport from Bitung to JRBM in Bakan North Sulawesi and Seruyung to SPP**

PTTC deploys appropriate equipment, which is designed and maintained to operate within the permitted loads of cyanide shipments. P212 Vehicle Management Procedure addresses the following:

- Keep records of new and existing vehicles, such as maintenance schedule, log books, pre-start checklists, drivers handbook, update training programs as required;
- Ensure vehicle maintenance is kept up to date; and ensure vehicles are used to their rated capacity

Preventive maintenance schedule and scope of works in place and verified as part of operation’s routine and preventive maintenance regime. PTTC do not subcontract any of the cyanide handling or transport.

PTTC has procedures and processes (P008 – Standard Operating Procedure for dangerous goods handling and P224 – Securing a Load) in place to make comparison and verification of gross weight of imported cyanide with maximum permitted vehicle loads as recommended by vehicle manufacture’s specifications with regards to payload capacity.

**Sea Transportation (TPS to Bitung domestic seaport)**

PTTC subcontracts TANTO commercial vessel for sea transportation from TPS to Port of Bitung. Vessel assigned deploys appropriate equipment, which is designed and maintained to operate within the permitted loads of cyanide shipments. Due diligence interview was conducted with relevant records to ascertain the relevancy and compliance. As part of continual assessment of subcontractor; PTTC had established a procedure to periodically audit TANTO that they comply with the Code requirement.

**Sea Transportation (Port Tarkan domestic seaport to Seruyung)**

PTTC subcontracts sea transportation from Port of Tarakan to Seruyung via PT. Lautan Jaya Utama. Due diligence interview was conducted with relevant records to ascertain the relevancy and compliance. PTTC had implemented due diligence procedure (P205) and LCT brief to ensure that LCT operators continue to make compliance with ICMC requirements.

**Land Transportation from TPS to Surabaya Tanjong Perak Domestic seaport**

Since Dec 2017, PTTC do not subcontract any of the cyanide handling or transport and had utilised own vehicles and own drivers for transportation of cyanide. Documented information on cyanide transportation by PTTC vehicles were reviewed with supporting information on delivery notes dated 4 Dec 2017, bill of lading and commercial invoices.

Name of Facility: PTTC  Signature of Lead Auditor  Date
& Technical Expert  3rd Jan 2018
SUMMARY AUDIT REPORT

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

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

Summarize the basis for this Finding/Deficiencies Identified:

Land transport from Bitung to JRBIM in Bakan North Sulawesi and Seruyung to SPP
PTTC had developed and implemented the following overarching procedures to facilitate implementation of a safety program for transport of cyanide (Reviewed Mar 2017):

- P201 – HSEC Management System
- P203 – Cyanide Management Procedure
- P209 – Road Transport Procedure

These procedures were implemented to ensure integrity of product within sealed containers from origin. The product is not unloaded while in transport until final mine site destination. Cyanide shipments are identifiable by Dangerous Goods (DG) placards required for cyanide transportation including Marine Pollutant placards.

Prior to cyanide transports, PTTC has implemented a vehicle inspection prior to each departure. The preventive maintenance program was checked for trucks and chassis. Maintenance schedule for these equipment are verified with documented records including vehicles change due to fair wear and tear.

The following are verified with established Road Transport Procedure:

- Rotating shifts for drivers
- Transportation can be modified depending on external conditions such as weather or community unrest
- Prevention of loads from shifting during transportation
- Alcohol test are being conducted on a random check basis

Implemented safety programs were established for the safe transportation commensurate with local operating conditions. Overall, verified documented records and on site assessment demonstrated respective compliance. PTTC do not subcontract any of the cyanide handling or transport.

Sea Transportation (TPS to Bitung domestic seaport)
PTTC subcontracts TANTO commercial vessel for sea transportation from TPS to Port of Bitung. Vessel deploys appropriate equipment, which is designed and maintained to operate within the permitted loads of cyanide shipments. Due diligence interview was conducted with relevant records to ascertain the relevancy and compliance. There is no manipulation of the packing as the tank containers are sealed and not opened. As part of continual assessment of subcontractor; PTTC had established a procedure to periodically audit TANTO that they comply with the Code requirement.

Name of Facility: PTTC
Signature of Lead Auditor
& Technical Expert
Date 3rd Jan 2018
SUMMARY AUDIT REPORT

Sea Transportation (Port Tarkan, domestic seaport to Seruyung)
PTTC subcontracts sea transportation from Port of Tarakan to Seruyung via PT. Lautan Jaya Utama. Due diligence interview was conducted with relevant records to ascertain the relevancy and compliance. PTTC had implemented due diligence procedure (P205) and LCT brief to ensure that LCT operators continue to make compliance with ICMC requirements.

Land Transportation from TPS to Surabaya Tanjong Perak Domestic seaport

Since Dec 2017, PTTC do not subcontract any of the cyanide handling or transport and had utilised own vehicles and own drivers for transportation of cyanide. Documented information on cyanide transportation by PTTC vehicles were reviewed with supporting information on delivery notes dated 4 Dec 2017, bill of lading and commercial invoices.
Summary Audit Report

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

☑ in full compliance with
☐ in substantial compliance with Transport Practice 1.5
☐ not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

Sea Transportation (TPS to Bitung domestic seaport (TANTO); TPS to Port Tarkan domestic seaport (SPI))
PTTC subcontracts TANTO and SPII commercial vessel for sea transportation from TPS to Port of Bitung and Port of Tarakan respectively. Due diligence review was conducted to verify compliance with the prevailing IMDG code. At the point of audit, the following were verified for compliance:

- TANTO has the applicable IMDG Code requirements available and staff interviewed on site was able to verify compliance of DG shipments with the applicable IMDG Code requirements.

- Packaged as required by Part 4 of the IMDG Code and according to the packaging instructions and packaging provisions indicated on the DG List. Based on representative shipments samples compliance was demonstrated.

- Not applicable for Section 5.2.1 and 5.2.2 of the IMDG code as cyanide is being shipped in form of intermediate bulk containers (IBCs) stored inside GP containers

- Cyanide shipments were sampled with documents and appropriate records to verify that shipments are identified with required placard and marked as required by Chapter 5.3 of the IMDG Code

- Sampled dangerous goods transport document verified with records demonstrated compliance with requirements under Chapter 5.4 of the IMDG Code.

- Not applicable for Section 5.4.2 of the DG code as the cyanide is packaged by producer as well as for outbound empty tank containers.

- Vessel carrying the cyanide containers had a manifest identifying the presence of the cyanide. Based on the manifest the container location can be checked with the detailed stowage plan. Both documents complement and conform to Section 5.4.3.1 of the DG Code.

- Vessel carrying the cyanide containers was found to have an Emergency Response Plan in place.

Overall, TANTO was found to be in compliance with the stowage and separation requirements of Part 7 of the IMDG Code concerning cyanide shipments

Name of Facility: PTTC
Signature of Lead Auditor & Technical Expert
Date 3rd Jan 2018
Sea Transportation (Port Tarkan domestic seaport to Seruyung)
PTTC subcontracts sea transportation from Port of Tarakan to Seruyung with PT Lautau Jaya Utama Tarakan which deploys Landing Craft Tank (LCT) Grajo Jaya. Due diligence was conducted for PT Lautau Jaya Utama Tarakan – LCT Grajo Jaya on 8 Aug for PT J Resources Seruyung sea transportation.

Inventory control of cyanide shipments were maintained by means of the shipping manifest along with designated loading areas for DG cargoes. The cyanide information is being made available with updated MSDS during voyages. This due diligence was conducted with relevant records to ascertain the relevancy and compliance. PTTC had implemented due diligence procedure (P205) and LCT brief to ensure that LCT operators continue to make compliance with ICMC requirements.

Due diligence investigation for LCT operator PT Lautan Jaya Utama was conducted on 8 Aug 2017 and it was conclusive that LCT operator PT Lautan Jaya Utama had in place appropriate measures for safe sea transportation of cyanide.

PTTC does not transport cyanide by air transportation.
SUMMARY AUDIT REPORT

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

☑ in full compliance with

The operation is ☐ in substantial compliance with Transport Practice 1.6

☐ not in compliance with

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

*(Due to the sensitivity of security issues regarding storage of cyanide, no descriptions of substantial or non-compliance with this aspect of the Transport Practice should be provided.)*

**Land transport from Bitung to JRBM in Bakan North Sulawesi and Seruyung to SPP**

PTTC had implemented four overarching procedures to facilitate tracking of cyanide shipments to prevent losses during transportation:

- P201 – HSEC Management System
- P202 – Cargo Tracking Procedure
- P203 – Cyanide Management Procedure
- P209 – Road Transport Procedure

These implemented procedures mandated transport vehicles (convoy and escort vehicle) to have in place mobile phones to enable two-way communications with operations room. This integrated system helps to mitigate the risk of communication blackouts and feedback system to review the chain of custody of cyanide shipments and ongoing risk assessment.

Shipments inventory controls are in place to prevent loss of cyanide shipments during land transportation as verified with cargo management records. There are no transfers of shipments during the entire of land transportation.

PTTC periodically tests communication equipment to ensure proper functioning. Assigned supervisor always communicates with cyanide transportation driver to monitor position, with regards to arrival time of cyanide transportation vehicles as it relates to arrival time / arrival which have been agreed with client as per procedural requirement in Standard Operating procedures (P111 and P112).

No blackout areas have been indentified. Currently, PTTC has a Command Center which is also monitor the movement of vehicles and their positions. if there are matters relating to operational issues, responses will be handled by the command center duty personnel.

On site route assessment and interviews with branch manager, yard manager, transport manager and escort leader were held. Along with respective delivery orders and accompanying MSDS verified with shipments records; are indicative that system is in place to ensure tracking of cyanide shipments and loss prevention.
Land Transportation from TPS to Surabaya Tanjong Perak Domestic seaport
Since Dec 2017, PTTC do not subcontract any of the cyanide handling or transport and had utilised own vehicles and own drivers for transportation of cyanide. Documented information on cyanide transportation by PTTC vehicles were reviewed with supporting information on delivery notes dated 4 Dec 2017, bill of lading and commercial invoices.

Sea Transportation (TPS to Bitung domestic seaport)
PTTC subcontracts TANTO commercial vessel for sea transportation from TPS to Port of Bitung. TANTO tracked the vessel movements and status such as vessel port of departure, daily situation reports and vessel ETA at port of destination. Based on interview held with operation staff, there are no known blackout spots for the communication at sea during the planned voyage. TANTO maintains inventory control of cyanide shipments by means of the shipping manifest along with designated loading areas for DG cargoes. The cyanide information is made available with updated MSDS during voyages.

As part of continual assessment of subcontractor; PTTC had established a procedure to periodically audit TANTO that they comply with the ICMI and contractual requirements.

Sea Transportation (Port Tarkan domestic seaport to Seruyung)
PTTC subcontracts sea transportation from Port of Tarakan to Seruyung via PT. Lautan Jaya Utama. Inventory control of cyanide shipments were maintained by means of the shipping manifest along with designated loading areas for DG cargoes. The cyanide information is being made available with updated MSDS during voyages. Due diligence interview was conducted with relevant records to ascertain the relevancy and compliance. PTTC had implemented due diligence procedure (P205) and LCT brief to ensure that LCT operators continue to make compliance with ICMC requirements.
SUMMARY AUDIT REPORT

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

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

☑ in full compliance with

The operation is ☐ in substantial compliance with Transport Practice 2.1

☐ not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The interim storage is situated within the Port of Surabaya (TPS).

Interim/trans-shipment storage is situated within TPS which serves as depot for laden inbound shipments prior to land transportation of cyanide. Security is being ensured with security post managed by outsourced security services as observed during on site visit. Visitors' access control is in place and monitored for entrance to TPS yard including areas designated for cyanide storage.

Site review of interim/trans-shipment storage conducted with the following observations:

- warning signs are visible around the yard indicative of the presence of toxic material and cyanide.
- within the interim storage, indicative segregation and separation of the dangerous goods and dedicated cyanide storage.
- at the actual storage area there are placards indicating the exact area in which the cyanide is stored. In addition to the placard there is also the SDS reflected in both English and Bahasa Indonesia.

At the entrance gates into the yard the following signs were clearly displayed; No Smoking and Eating

Stringent Personal Protection Equipment (PPE) requirements are enforced in the yard indicated by signs at the entrance:
- Helmet
- Safety Shoes
- Chemical Glasses
- Overall/PPE clothing

Dedicated in house security officers are stationed at the yard for access controls and movement of containers. This augments well for the prevention of planned and accidental access by general public. Control tower also has a clear view of the DG storage area. There is no possible build-up of hydrogen cyanide as the storage is in the open air and thus well ventilated. This outdoor storage is built on a concrete ground provides the assurance that cyanide containers will not come in contact with water and soil.

Overall, interviews with TPS and TPB personnel together with safety and environmental management systems in place demonstrate compliances and alertness to the presence of cyanide and its related risks.

Name of Facility: PTTC
Signature of Lead Auditor & Technical Expert
Date
3rd Jan 2018
SUMMARY AUDIT REPORT

Due to PTTC change of business model; interim storage at Port of Tarakan was no longer used as interim storage. Project manager always coordinates and ensures that the arrival and departure schedule of the vessel from Surabaya to Tarakan is in accordance with the plan, as well as the availability of LCT in Tarakan has been well organized so that upon arrival the container at Tarakan port, it can be loaded soonest (going ship to ship) to LCT who has been waiting and continued sea transportation to Seruyung port. If for any reason the transfer process is not possible and sea transportation from Port of Tarakan to Seruyung and carry delayed, cyanide containers will be kept temporarily in the Tarakan Port and manager/field supervisor ensures the item is placed separately from incompatible materials and also others container and can be ascertained no more than 48 hours the containers have to be transported. PTTC always strives for no more than 24 hours, but there are often unexpected things that can happen, the principles of risk analysis applies, Project Manager or supervisor is required to comply with the standard in accordance with Standard Operating Procedure # 228 (Yard Management Procedure). However, till date, PTTC has not experienced in cyanide containers need to be stored in Port Tarakan due to the proper planning and control processes.

PTTC had established a procedure (P205 and F203 to periodically audit TPS as transshipment/interim (for trans-shipment prior to shipment to mine) that they comply with the ICMI and contractual requirements for interim storage.
3. EMERGENCY RESPONSE: Protect communities and the environment through the development of emergency response strategies and capabilities

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

☑ in full compliance with

☐☐ ☐☐ in substantial compliance with Transport Practice 3.1

☐☐ ☐☐ not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

Land transport from Bitung to JRBM in Bakan North Sulawesi and Seruyung to SPP

PTTC had implemented procedure (P235 – Cyanide Emergency Response Plan) in place for emergency response plans (ERP) for potential cyanide releases to address both ERP for interim storage and land transportation. Management of the following identified incidents leading to potential cyanide release derived were from risk assessment:
- Chemical Spillage at Interim Storage
- Chemical Spillage during land transportation
- Vehicle accidents
- Loading and unloading accidents
- Fire at interim storage

Respective classifications of incidents correspond with incident response structure taking into account the physical and chemical form of cyanide during accidental release. Requirements of transport infrastructure are considered as part of the overall ERP:
- Recovery vehicle
- Evacuation zones
- Communications with external responders
- Respective roles and integrated response with local communities, medical facilities, local authorities, fire departments and Port authorities
- Design of trailers and interim storage areas to minimize the risks

Sea Transportation (TPS to Bitung domestic seaport)

PTTC subcontracts TANTO commercial vessel for sea transportation from TPS to Port of Bitung. Due diligence review and interview held with operations staff highlighted the contents of the ERP as follows:
- Emergency Committee
- Operation of Emergency Committee
- Drill to encounter an Emergency Hazard
- Emergency Committee Contact List
- Escalation processes

The ERP as part of shipboard management plan covers the voyage route under TANTO responsibility.

Name of Facility: PTTC
Signature of Lead Auditor
& Technical Expert
Date 3rd Jan 2018
Sea Transportation (Port Tarkan, domestic seaport to Seruyung)
PTTC subcontracts sea transportation from Port of Tarakan to Seruyung via PT. Lautan Jaya Utama. Due diligence interview was conducted with relevant records to ascertain the relevancy and compliance. PTTC had implemented due diligence procedure (P205) and LCT brief to ensure that LCT operators continue to make compliance with ICMC requirements.

Land Transportation from TPS to Surabaya Tanjong Perak Domestic seaport
Since Dec 2017, PTTC do not subcontract any of the cyanide handling or transport and had utilised own vehicles and own drivers for transportation of cyanide. Documented information on cyanide transportation by PTTC vehicles were reviewed with supporting information on delivery notes dated 4 Dec 2017, bill of lading and commercial invoices.
**SUMMARY AUDIT REPORT**

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

☐ in full compliance with

The operation is ☐ in substantial compliance with Transport Practice 3.2

☐ not in compliance with

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

Land transport from Bitung to JRBM in Bakan North Sulawesi and Seruyung to SPP

PTTC implemented procedure (P235 – Cyanide Emergency Response Plan) was reviewed to examine the Emergency Response Plan (ERP) training as part of the Dangerous Goods Awareness Training conducted for personnel involved in port, yard and transportation operations covering the following:

- Specific roles and responsibilities during activation of ERP
- Media liaisons
- Loading/unloading, yard and transportation designated emergency response equipment
- Personal Protective Equipment (PPE)

This includes specific cyanide emergency response duties and responsibilities assigns to its personnel and outside responders during response to emergency incidents such as leakage

- To carry out initial action to contain the leakage
- To alert branch manager
- To minimize the risk to people and environment

PTTC keeps emergency response equipment during transportation in Emergency Response Vehicle along with accompanied list of equipment such as full face respirator, gas detector and spill kits.

Maintenance regime was established to ensure the assurance on the functionality of the emergency response equipment. Records are maintained for this regime along with the list emergency response required for ERP for yard and transportation operations.

PTTC F102 HSEC Matrix (Training) spelt out the qualifications and internal training that is required for each employee. PTTC provides refresher training in emergency response procedures for cyanide handling personnel such as drivers on an annual basis. The current training was conducted on 10 Oct 2017 focusing on cyanide emergency response and handling of chemicals. PTTC do not subcontract any of the cyanide handling or transport.

Refresher training is being implemented to ensure personnel are familiar with work requirements and emergency situations. Training records (Emergency and Critical Response Training for Cyanide and Other Hazard on 7 Sep 2017. Interviews during on site held with trainer and designated emergency responders demonstrated required competencies.
SUMMARY AUDIT REPORT

Sea Transportation (TPS to Bitung domestic seaport)
PTTC subcontracts TANTO commercial vessel for sea transportation from TPS to Port of Bitung. Due diligence review and interview held with operations staff ascertain that emergency response training of their vessel were provide for personnel covering the following:

- Emergency Committee
- Operation of Emergency Committee
- Drill to encounter an Emergency Hazard
- Emergency Committee Contact List
- Escalation processes

The Emergency Equipment and PPE available on the vessel focus mainly on firefighting at sea and liquid spills. There is regular training for the vessel crew and the captain and designated persons have been trained on cyanide requirements.

Sea Transportation (Port Tarkan domestic seaport to Seruyung)
PTTC subcontracts sea transportation from Port of Tarakan to Seruyung via PT. Lautan Jaya Utama. Due diligence interview was conducted with relevant records to ascertain the relevancy and compliance. PTTC had implemented due diligence procedure (P205) and LCT brief to ensure that LCT operators continue to make compliance with ICMC requirements.

Land Transportation from TPS to Surabaya Tanjong Perak Domestic seaport
Since Dec 2017, PTTC do not subcontract any of the cyanide handling or transport and had utilised own vehicles and own drivers for transportation of cyanide. Documented information on cyanide transportation by PTTC vehicles were reviewed with supporting information on delivery notes dated 4 Dec 2017, bill of lading and commercial invoices.
SUMMARY AUDIT REPORT

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

☑ in full compliance with

☐ ☐ ☐ ☐ in substantial compliance with Transport Practice 3.3

☐ ☐ ☐ ☐ not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

Land transport from Bitung to JRBM in Bakan North Sulawesi and Seruyung to SPP

PTTC had in place procedures (P235) and contact information for respective notification of emergencies in the event of emergencies that occur during transportation. Implemented ERP procedure covers both internal and external emergency notification and reporting as part of the incident response structure (P250). This is being reviewed during tool-box meeting prior to land transportation. Contact lists are currently updated during these meetings.

Records are maintained with the list emergency response contacts required for ERP for yard and transportation operations. On site interviews held with respective personnel verified that the implemented ERP and associated contact lists.

Land Transportation from TPS to Surabaya Tanjong Perak Domestic seaport

Since Dec 2017, PTTC do not subcontract any of the cyanide handling or transport and had utilised own vehicles and own drivers for transportation of cyanide. Documented information on cyanide transportation by PTTC vehicles were reviewed with supporting information on delivery notes dated 4 Dec 2017, bill of lading and commercial invoices.

Sea Transportation (TPS to Bitung domestic seaport)

PTTC subcontracts TANTO commercial vessel for sea transportation from TPS to Port of Bitung. On site verification with operations staff ascertained that ERP provides the following communications links and means with internal and external contacts during activation of ERP:

- Communication with External Parties
- Emergency Committee Contact List

Sea Transportation (Port Tarkan domestic seaport to Seruyung)

PTTC subcontracts sea transportation from Port of Tarakan to Seruyung via PT. Lautan Jaya Utama. On site verification with operations staff ascertained that ERP provides the following communications links and means with internal and external contacts during activation of ERP:

- Communication with External Parties
- Emergency Committee Contact List

Name of Facility: PTTC
Signature of Lead Auditor
& Technical Expert

Date
3rd Jan 2018
SUMMARY AUDIT REPORT

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

- ☑ in full compliance with

The operation is  ☐ in substantial compliance with  Transport Practice 3.4

- ☐ not in compliance with

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

Land transport from Bitung to JRBM in Bakan North Sulawesi and Seruyung to SPP

PTTC ERP procedures (P235) outline the spill contingency plan in the event of accidental spillage; dictates the agreement with mine site to respond. P235 also outline procedures for remediation, such as recovery or neutralization of solutions or solids and decontamination of soils or other contaminated media.

P235 addresses the prohibition on the use of chemicals such as sodium hypochlorite, ferrous sulphate and hydrogen peroxide to treat cyanide that has been released into surface waters. Interviews held with incident response team members on the implementation and understanding of Emergency Response Plan for transport of hazardous chemicals. Interviewed staff is able to describe the responsibilities and appropriate actions required when an emergency occurred during transportation. PTTC do not subcontract any of the cyanide handling or transport.

For treatment of cyanide that has been released into the water, is not applicable for PTTC as responsibility to treat contaminated product and material is under JRBM and SPP responsibility.

Interviews held with incident response team members on the implementation and understanding of Emergency Response Plan for transport of hazardous chemicals. Interviewed staff is able to describe the responsibilities and appropriate actions required when an emergency occurred during transportation.
**SUMMARY AUDIT REPORT**

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

- ☑️ in full compliance with
- ☐️ in substantial compliance with Transport Practice 3.5
- ☐️ not in compliance with

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

Land transport from Bitung to JRBM in Bakan North Sulawesi and Seruyung to SPP

PTTC implemented ERP procedure covers periodic review for the suitability, adequacy and effectiveness of the ERPs. This is being also being reviewed during pre-loading meeting with port operator and tool box meeting prior to land transportation. Contact lists are currently updated during these meetings. Mock drill was conducted in Sep 2017 and follow up ERP training was conducted on 10 Oct 2017. Mock drills schedule is being drawn up for year to include the scenarios of land transportation with respective external responders. PTTC do not subcontract any of the cyanide handling or transport. PTTC do not subcontract any of the cyanide handling or transport.

A mock drill in the form of training awareness for PT SPP, PT SPIL and PT LJUT was conducted on 7 Sep 2017. Records of this mock drill are maintained and key observations are subsequently incorporated with the list emergency response contacts required for response.