

**INTERNATIONAL CYANIDE MANAGEMENT INSTITUTE**

**DRAFT**

**Transportation Summary Re-Certification Audit Report**

**Tanker Services, a Division of ILSAG(Pty) Ltd, a DP World Company**

**16 Fairbanks St,  
Vanderbijlpark,  
1913**

**04 to 06 March 2024**

**For the  
International Cyanide Management Code**

**TRANSPORTATION SUMMARY AUDIT REPORT**

**Operation General Information**

Name of Transport Operation: Tanker Services, a Division of ILSAG (Pty) Ltd, a DP World Company

Name of Facility Owner: Tanker Services, a Division of ILSAG (Pty) Ltd, a DP World Company

Name of Facility Operator: Tanker Services, a Division of ILSAG (Pty) Ltd, a DP World Company

Name of Responsible Manager: Mr Gary Garner

Address: 16 Fairbanks St, Vanderbijlpark, 1913

State / Province: Emfuleni, Gauteng

Country: South Africa

Telephone: Landline +27 11 821 6800  
Mobile +27 79 506 5074

Fax: N/A


Email: Gary.Garner@dpworld.com

**Operation Location Detail and Description**

Tanker Services, a Division of ILSAG (Pty) Ltd, a DP World Company, is a major logistics operator with national and cross-border infrastructure, a world-class fleet, extensive experience and state-of-the-art facilities. Service offering extends beyond South Africa into Botswana, Lesotho, Malawi, Mozambique, Namibia, Eswatini, Zambia and Zimbabwe.

Sodium Cyanide solution is loaded into dedicated bulk road tankers at the Sasol South Africa (Pty) Ltd (Sasol) cyanide production plant in Sasolburg and transported to mine sites throughout South

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Africa. Limited amounts of solid cyanide are received via the Port of Durban. Solid cyanide is transported by road in six-metre sea containers packed with wooden crates containing cyanide in solid briquette form. Sea containers are loaded onto skeletal semi-trailers.

### Auditor's Finding

This operation is in

**X full compliance**

in substantial compliance \*(see below)

not in compliance

**with the International Cyanide Management Code.**

\* 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.

### Compliance Statement

This operation has been found to be in full compliance with the requirements of the ICMI Cyanide transportation re-certification audit requirements. This operation has not experienced any compliance issues or significant cyanide incidents during the previous audit cycle.

### Auditor Information

Audit Company: Transheq Consulting and Auditing (Pty) Ltd

Lead and Transportation Auditor: Richard Durrant

Lead Auditor Email: [richard@transheq.co.za](mailto:richard@transheq.co.za)

Names and Signatures of Other Auditors: (N/A - Sole auditor)

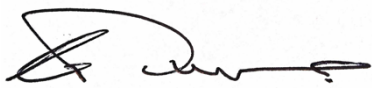
Dates of Audit: 04, 05 and 06 March 2024

### Auditor Attestation

I attest that I meet the criteria for knowledge, experience and conflict of interest for a Cyanide Code Certification Audit Lead Auditor, 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 Certification Auditors.

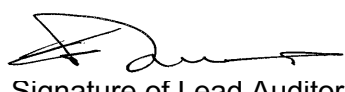
I attest that this Summary Audit Report accurately describes the findings of the certification audit. I further attest that the certification audit was conducted in a professional manner in accordance with the International Cyanide Management Code Cyanide Transportation Verification Protocol and using standard and accepted practices for health, safety and environmental audits.

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## Principles and Standards of Practice

### Principle 1 | TRANSPORT

Transport cyanide in a manner that minimizes the potential for accidents and releases.

#### Standard of Practice 1.1

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

#### X in full compliance with

The operation is  in substantial compliance with Standard of Practice 1.1

not in compliance with

#### *The basis for this Finding/Deficiencies Identified:*

Route Risk Assessments (RRAs) are in place. All route risk assessments on the primary and secondary routes were conducted in accordance with the transporter's procedure and guidelines. RRAs are reviewed and updated as necessary but at least every two years. Heavy pedestrian presence is identified along some routes, and informal settlements near the road are also included in the RRAs.

The delivery infrastructure consists only of roadways. Road conditions vary considerably from excellent dual carriageway to single roadway with no shoulder and unpaved road surfaces in some instances. Pitch and grade are included as steep inclines and declines are evident on some delivery routes.

Water crossings are indicated on RRAs. Loaded cyanide vehicles make several river crossings on some of the routes travelled.

Route constrain reports are received from drivers during debriefing sessions, and where possible, routes are amended, and RRAs are amended as applicable. RRA's include the identified and possible risks along the routes travelled together with the controls and mitigation measure to reduce the risk to as low hazard only as reasonably practicable.

The contents of the various route risk assessments are made known to the truck drivers through documented route plans. RRA and route conditions are discussed with drivers during pre-trip briefing sessions, and a summarised one-pager RRA/Route Plan document is handed to the driver. Driver's Briefing and Debriefing procedures are in place.


Government agencies (Local Municipalities) have been advised of each route in which cyanide is being transported. This communication includes copies of the Emergency Procedure and Safety Data Sheet (SDS). Road Shows are conducted at least once yearly, and meetings and consultations are held with community leaders and members.

Escorting or convoys for cyanide is not a legal requirement and are not used in practice as individual tanker vehicles make deliveries to individual mine sites.

Live vehicle tracking and on-board cameras are installed on vehicles and tracked throughout the journeys. The tracking systems have voice communication capability and "panic buttons", which the driver can activate in an emergency. The tanker trailers all have separate self-powered tracking units installed, which can be activated remotely should a tanker be uncoupled for any reason.

The company undertakes no sub-contracting of cyanide transport activities.

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**Standard of Practice 1.2**

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

**X in full compliance with**

The operation is  in substantial compliance with Standard of Practice 1.2  
 not in compliance with

*The basis for this Finding/Deficiencies Identified:*

Road Traffic Legislation situates the minimum requirements for drivers to be trained and employed as dangerous goods drivers.

Pre-employment screening and Occupational Health Practitioner (OHP) medicals are conducted before employment. Annual medicals and annual Transport of Dangerous Goods training and cyanide-specific training are conducted thereafter. The Tanker Services onsite training facility and trainer are registered and approved by the South African Transport Education Training Authority, and all approved and required training is conducted on-site.

Cyanide-specific training is conducted annually. At least annually, task observation, driver evaluation and on-road observations are conducted on all drivers. Drivers attended theoretical and practical training, and all have passed a Level 1 Basic First Aid training course.

Loading of road tankers is done solely by the Consignor, Sasol. Some mines require that drivers be trained in the Consignee's off-loading procedures.

The company undertakes no sub-contracting of cyanide transport activities.

**Standard of Practice 1.3**

*Ensure that transport equipment is suitable for the cyanide shipment.*

**X in full compliance with**

The operation is  in substantial compliance with Standard of Practice 1.3  
 not in compliance with


*The basis for this Finding/Deficiencies Identified:*

The company utilises dedicated liquid cyanide bulk road tankers. The road tankers in use are manufactured in accordance with South African National Standards, which closely follow the ADR - International Transport of Dangerous Goods by Road specifications. The ongoing pressure testing and integrity inspection of these tankers is also required by legislation.

Each truck tractor and tanker combination has an allowable laden mass or Gross Vehicle Mass (GVM) which is determined by the original equipment manufacturer/s and which also cannot be exceeded the South African Road Traffic Legislation mass limitations. No loaded tanker will be permitted to leave the loading point of the GVM is exceeded.

The transport of cyanide in briquette form is conducted using flat deck or skeletal semi-trailers fitted with twist locks transporting six-metre ISO shipping containers. The loaded mass (GVM) of the vehicles are well within the original equipment manufacturer/s and the South African Road Traffic Legislation mass limitations

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The Consignor's loading gantry staff uses a closed circuit filling method to load the bulk liquid road tankers. The drivers are not involved in the loading and must remain in the vehicle's driver's cab during the loading process.

Tank probes/overflow sensors are installed on each tanker. The loading gantry load management system will not allow the loading of more litres than specified and loaded on the system for each tanker depending on its volume and unloaded/tare mass. Before and after loading, tankers also pass over a calibrated weighbridge where the vehicle mass is measured in total and per axle group.

The transport of cyanide in briquette form is conducted using flat deck or skeletal semi-trailers transporting six-metre ISO shipping containers. Semi-trailer combinations have a load capacity of approximately 30 tons. A six-metre shipping container loaded with cyanide briquettes has a mass of approximately 22 tons, well within the legal and vehicle design capacity.

The company undertakes no sub-contracting of cyanide transport activities

#### **Standard of Practice 1.4**

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

#### **X in full compliance with**

The operation is  in substantial compliance with Standard of Practice 1.4

not in compliance with

*The basis for this Finding/Deficiencies Identified:*

The transport of cyanide in briquette form is conducted using flat deck or skeletal semi-trailers transporting six-metre ISO shipping containers. The packaging for the briquette cyanide conforms to the IMDG (International Maritime Dangerous Goods) Code and is packed at the source by the producer/consignor. The transport does not handle the packed cyanide in any way.

Placarding/Signage on tankers and trailers is as per the National Road Traffic Act and Regulations and referenced SANS 10232-1 - Correct product UN number, the transporter telephone number, the specialist advice telephone number and the product hazard diamond are displayed on the placards. Three placards are fitted to each tanker/trailer, one on either side and one on the rear. An orange diamond is also displayed on the front of the truck tractor.

Vehicle Daily Checklist is completed by the driver before departing from the yard to load or if the tanker has been pre-loaded and parked overnight in the yard. Once this inspection is done, a designated Inspector completes a further inspection using a Tanker Inspection Check Sheet document. The pre departure inspections are conducted on all vehicle combinations – truck tractors, tankers and semi-trailers that leave the yard irrespective whether they are loaded or empty


A vehicle preventive maintenance schedule is in place, which lists the date and kilometres of the last service and the interval to the next service. The vehicle preventive maintenance is conducted on all vehicles – truck tractors, tankers and semi-trailers that are operated from the company depot.

The schedule also indicates the last pressure test date and the interval to the next inspection test for the bulk liquid tankers.

Tyre surveys are conducted at each maintenance service, where the pressure of each of the tyres and the tread depth are measured and recorded. The tyres are also inspected daily by the driver and recorded on the Vehicle Daily Checklist.

Pressure gauges and pressure relief valves of the tankers are tested and verified every six months.

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Limitations on operator or drivers' duty hours are managed in accordance with the Bargaining Council for the Road Freight and Logistics Industry criteria. No discrepancies were identified.

Daily Time Sheets in place. A weekly and monthly control matrix is in place to manage working hours/days and resting and off days for each driver.

Procedures to prevent loads from shifting. 20 x IBC boxes are packed into a 6m container, giving a tight fit and preventing excessive load shifting. The shipping container is sealed at the source, and the Transporter cannot affect any inspection or change to the load configuration.

Notifications of civil unrest, adverse weather or any other possible disruptions are shared broadly on mobile communications groups for all drivers. Cyanide-specific drivers will also be contacted directly on in-cab mobile hands-free communication devices and advised to park off or to re-route if required. In the event of an incident whereby transportation must be modified or suspended the driver will contact their depot and the depot will contact the Clients Emergency Call Centre. Depending on the circumstances of the incident, procedures are documented in various Emergency Action Plan which lists actions, responsibilities and emergency response teams.

Alcohol testing is conducted on all persons who enter and exit from Depot. Annual urine drug testing is conducted at the time of annual OHP medicals. Random testing can be conducted on suspicion of drug or alcohol use while on duty. A Drug and Alcohol Assistance programme is in place to assist employees if required.

Guide on the Retention of Records from the South African Institute of Chartered Accountants is in place and use.

The company undertakes no sub-contracting of cyanide transport activities.

### **Standard of Practice 1.5**

*Follow international standards for transportation of Cyanide by sea.*

**X in full compliance with**

The operation is  in substantial compliance with Standard of Practice 1.5

not in compliance with

*The basis for this Finding/Deficiencies Identified:*

Not applicable. The transporter will only transport Cyanide by road and is not involved in cyanide transport by sea.

### **Standard of Practice 1.6**

*Track cyanide shipments to prevent losses during transport.*

**X in full compliance with**


The operation is  in substantial compliance with Standard of Practice 1.6

not in compliance with

*The basis for this Finding/Deficiencies Identified:*

A tracking system is installed in all vehicles, which includes Voice-Kit hands-free devices. In the event of a problem, the driver will call the depot using the Voice Kit or use the emergency panic button installed in the

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vehicle. The Consignor, the Consignor's logistics agent, and the mine/consignee will then be notified. In the event of an accident or similar incident, the driver will contact the depot, and the depot will contact the Sasol 24-Hour Emergency Call Centre. Procedures are documents in various Emergency Action Plans (EAP) that list actions, responsibilities and emergency response teams.

Weekly tracking Health Checks are conducted to verify the operation of vehicle tracking units. Operations Controllers are continually monitoring the locations of vehicles while en route. If communication is lost, procedures are in place as to actions to be taken by whom to determine the reason for the lost signal or alarm received. Blackout areas are identified and listed for all applicable routes.

Inventory controls and/or chain of custody documentation are in place to prevent loss of cyanide during shipment. Loaded tankers pass over a weighbridge after loading. All loading and offloading points on the tanker are sealed while at the loading point. Seal numbers are recorded, and the Consignor holds records. Delivery Notes and Dangerous Goods Declarations make reference to sodium cyanide and the volume/mass of the loaded product. The loading point issues Transport Emergency Cards, which details the immediate actions to be taken in the event of an incident. Safety Data Sheets are available at the loading point, depot and mine sites.

The company undertakes no sub-contracting of cyanide transport activities.

## Principle 2 | INTERIM STORAGE

Design, construct and operate cyanide interim storage sites to prevent releases and exposures.

### Standard of Practice 2.1

*Store cyanide in a manner that minimizes the potential for accidental releases.*

#### X in full compliance with

The operation is  in substantial compliance with Standard of Practice 2.1

not in compliance with

#### *The basis for this Finding/Deficiencies Identified:*

The transporter has a purpose-built Cyanide Yard where empty, unwashed, and pre-loaded cyanide tankers are parked. Pre-loaded cyanide truck tractors and tankers are at times parked overnight but not for more than 12 hours.


This area is fenced off with a 1.8 metre-high fence, and entrance and exit gates are kept locked at all times. Keys are controlled by the security officer on duty in this area. Only the security officers on duty are allowed to unlock the entrance gates. The visitor's register is completed at the entrance. Security Officer escorts visitors to and inside the parking area.

This yard has an impervious surface. The entire parking area is so designed and built to contain any liquid spill that may occur. In the event of a product leak or spill, the yard surface slopes towards a primary and secondary liquid containment sump and tank.

The discharge pump in the primary spillage containment area can only be activated from a switch situated on the inside of the fenced-off area in proximity to the inside of the entrance gate. An emergency alarm switch is available at the entrance gate.

A fully equipped spill kit is available in the parking area, a windsock is in place, and a first aid kit, emergency oxygen unit units and PPE are in place. All relevant safety signage is displayed, is clean and clearly visible. Signage is displayed on all sides of the fenced-off area.

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The Cyanide Yard is situated well away from all other activities in the depot site. No other chemicals are stored on the site. No solid cyanide is stored at the depot site.

### Principle 3 | EMERGENCY RESPONSE

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

#### Standard of Practice 3.1

*Prepare detailed emergency response plans for potential cyanide releases.*

#### X in full compliance with

The operation is  in substantial compliance with Standard of Practice 3.1

not in compliance with

*The basis for this Finding/Deficiencies Identified:*

Emergency Preparedness and Response Procedures (EAPs) for cyanide scenarios, including Spillage of Liquid Cyanide and Solid Cyanide.

Route Risk Assessments are in place for all routes travelled. The nature and condition of the transport infrastructure are documented in these assessments.

Vehicle design and specifications comply with legislation and additional cyanide-specific loading and offloading requirements.

National and International agreements with various Spill Response Companies are in place to cover all chemical products, including cyanide. Agreements are also in place for 24-hour medical response, stabilisation services, and transportation by road or air to medical facilities.

The driver is the First Responder to a cyanide spill that may occur on the road/route.

Chemicals not to be used in the treatment of a cyanide spill are specifically listed in the procedure.

Mock cyanide drills are held annually with the Municipal Emergency Services on routes travelled with cyanide. Video recordings of mock emergency exercises are available.

Fully equipped Emergency "Hazmat" trailers are supplied by the Sasol and are located at fourteen locations in South Africa. The Sasol inspects the trailers and conducts training on the use of the emergency equipment contained in the trailers. The transporter has one of these trailers available on their site and conducts their own inspections.

#### Standard of Practice 3.2

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


#### X in full compliance with

The operation is  in substantial compliance with Standard of Practice 3.2

not in compliance with

*The basis for this Finding/Deficiencies Identified:*

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Training matrix in place – Annual cyanide refresher training for all drivers. Controllers and management also receive training in Emergency Response Procedures (ERP) requirements. SpillTech and Emergency Responders are trained by the Cyanide supplier Sasol in the required emergency procedures. The various ERPs detail responsibilities and actions required by various personnel – The transporter does not directly respond to the incident. The truck drivers have been trained as first responders only. The Fire and Emergency Services on each route have been trained by Sasol. Sasol provides fully equipped emergency response trailers with emergency equipment at fourteen locations sites on major routes throughout South Africa.

The drivers are issued with comprehensive PPE to be used in the event of a chemical and cyanide incident. This PPE includes the standard driver PPE as well as a PVC full one piece Suit, White PVC full Hood, Chemical Goggles, Full Face Mask fitted with a Canister Filter to protect against HCN gas inhalation and Eye Wash Bottle.

SpillTech, the primary spill response company, will take over responsibly when their team arrives on the site. Agreements are in place with SpillTech (Pty) Ltd, to cover emergency response to all chemical products and with ER24, an emergency medical care response company.

Driver Daily Checklist is used to inspect the driver's emergency response equipment. These checklists are signed by the Driver supervisor, and an Assessor conducts spot checks.

The Emergency Response trailer parked at Tanker Services has a monthly equipment checklist. Driver Training Officer of Tanker Services is responsible for conducting these inspections.

### **Standard of Practice 3.3**

*Develop procedures for internal and external emergency notification and reporting.*

#### **X in full compliance with**

The operation is  in substantial compliance with Standard of Practice 3.3

not in compliance with

*The basis for this Finding/Deficiencies Identified:*

ERP Flow diagram is in place detailing reporting requirements, including the various Governmental Departments as required, depending on the nature of the emergency. Contact details for SpillTech and ER24 as emergency responders are also included in the ERP.

The Safety Health Environment Management System (SHEMS) is the transport company's visible online portal. Control and monitoring of the validity of documents is the responsibility of the SHEQ Executive.

ICMI reporting requirements are included in the EMP. No significant cyanide incidents have occurred in the transport of cyanide since the last audit, nor before this.

### **Standard of Practice 3.4**

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


#### **X in full compliance with**

The operation is  in substantial compliance with Standard of Practice 3.4

not in compliance with

*The basis for this Finding/Deficiencies Identified:*

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The driver is the first responder. Training has been provided to all cyanide drivers, who have the necessary PPE and equipment to contain a spillage.

The SpillTech agreement is in place to recover or neutralise solutions or solids, decontaminate soils or other contaminated media and manage and/or dispose of spill clean-up debris. The ERP prohibits the use of chemicals such as sodium hypochlorite, ferrous sulfate, and hydrogen peroxide to treat cyanide released into surface water. The SpillTech Emergency Cyanide Response Procedure also prohibits the use of these chemicals to treat cyanide released into surface water.

**Standard of Practice 3.5**

*Periodically evaluate response procedures and capabilities and revise them as needed.*

**X in full compliance with**

The operation is  in substantial compliance with Standard of Practice 3.5

not in compliance with

*The basis for this Finding/Deficiencies Identified:*

The ERP is reviewed on an annual basis or after a significant incident has occurred. The EMP's last revision date was March 2024. Mock on-road exercises and desktop exercises are conducted in various scenarios and products. This is done annually or after a significant incident or mock exercise. Mock drills include both cyanide exposures and releases to determine if response procedures are adequate, response equipment is appropriate, and if personnel are adequately trained.

End of Report