## INTERNATIONAL CYANIDE MANAGEMENT INSTITUTE

# Transportation Summary Certification Audit Report

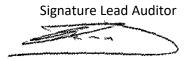
Tanker Services Food & Chemicals, a Division of Imperial Logistics South Africa Group Proprietary Limited.

Vanderbijlpark, South Africa

18th to 20th October 2021.

Follow-up visit to transporter on 8<sup>th</sup> December 2021 and March 2022.

## For the International Cyanide Management Code



Name of Operation : Tanker Services Food & Chemicals, a division

of Imperial Logistics South Africa Group (PTY)

Ltd.

Name of Operation Owner : Imperial Holdings

Name of Operation Operator : Imperial Logistics South Africa Group (PTY) Ltd.

Name of Responsible Manager : Mr. Dirk Geyer.

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#### Location detail and description of operation:

The Depot deals with the transport of sodium cyanide solution and sodium cyanide briquette. Depot is situated at 30 Fairbanks Road, Vanderbijlpark, Gauteng Province, South Africa.

Besides the transportation of sodium cyanide, Tanker Services also transports other Sasol products such as hydrochloric acid, sodium hydroxide solution, sodium hypochlorite solution and anhydrous ammonia, ammonium nitrate and polyvinyl chloride. For the same Consignee sodium cyanide briquette packed in freight containers, is transported from the Durban harbour to the Sasol's cyanide plant in Sasolburg. Same product is transported from Sasol in Sasolburg to a mine situated in Barberton in South Africa.

Tanker Services operates as an individually certified transporter entity. In terms of the business agreement between Sasol and Tanker Services, Food and Chemical Division, all the dedicated road bulk liquid cyanide tankers, truck tractors, trailers, the drivers, owner-driven truck tractors and their associated operating and maintenance records and documentation, are under the control of Tanker Services.

The dedicated road tankers for sodium cyanide solution are stalled in a dedicated properly fenced off area situated at the depot in Vanderbijlpark. From here they are dispatched to the consignor's premises to be loaded. From there loaded road tankers are directly dispatched to various end users. Entrance to the dedicated area is under the control and supervision of the security officer on duty at the access entrance to the depot premises.

The truck tractors are also stalled on Tanker Service's depot but away from any other truck tractors. The dedicated parking area for tankers is about 30 meters away from the area where other vehicles are parked. From the Vanderbijlpark depot the nominated cyanide

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drivers with their vehicle combinations are dispatched to Consignor (Sasol) to load road tankers and dispatched to various end users.

After been loaded, 98% of the time the vehicles depart from Sasol's cyanide plant directly to the various Consignees based at various gold mines in South Africa. In exceptional situations, but not the rule, road tankers are pre-loaded parked at the Depot. Vehicles depart the following day from there. Standing time in the cyanide yard no longer than 18 hours. During situations like this, the road tanker remains hitched to the prime mover. Night driving is not permitted.

Movement of vehicles are controlled from the Operations Offices which is 24/7, 365 days per year manned at the Tanker Services Depot in Vanderbijlpark. Tanker Services is also utilising an external service provider tracking system Mix Telemetric. Vehicle movement on route is monitored and tracking by this an external service provider.

Truck tractors hitched to empty Sodium cyanide tankers will be allowed to enter the Vanderbijlpark Depot for refuelling, parking of road tankers in a designated cyanide parking area and for the collection of documentation for the next consignment.

When the road tankers are required for maintenance repairs to be performed e.g. three (3) yearly statutory pressure testing or regular maintenance to be performed on the road tanker or sent to a Governmental approved vehicle testing station for a Certificate of Fitness (COF) to be issued, tankers are taken to the Sasol cyanide plant washing facility where the road tankers are internally and externally decontaminated. Contaminated water is collected and sent to the cyanide plant.

As Sasol (product owner / Consignor) being the most knowledgeable on sodium cyanide, Tanker Services has entered into an agreement with Sasol that the transporter will inform Consignor the detail of the various routes the product is been transported.

With regards to the conducting of route risk assessments, this function has been handed over from Sasol to the transporter. Latter is solely responsible to conduct of this function. It is the transporter's responsibility to inform the drivers of the hazards noted on route. This is done during the briefing session between the Operations clerk and the driver.

Clause 4.2.3 of the South African standard, SANS 10231-1:2019 Ed 4.2, requires the following from the transporter: -

"The operator shall inform the local authority of the areas through which the vehicle will pass, and shall provide them with full information regarding the product to be transported (when requested by the local authority), the nature of its hazard, and the intended route. When the nature of business requires the transport of similar cargo on a regular basis, it will be sufficient to submit this information at the start of operations only. The operator shall, however, inform the appropriate local authority of the discontinuation of such operations."

During the audit this requirement was verified and found to have been done.

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#### **Auditor's Finding**

This operation is

**X in full compliance \*(see below)** with the International Cyanide Management Code.

in substantial compliance.

not in compliance

The audit was conducted on 18<sup>th</sup> to 20<sup>th</sup> October 2021. Due to more information that was required, the transporter's facility was revisited on 8<sup>th</sup> December 2021 and mid March 2022.

During the audit a few partly compliant and a few non-compliances were identified. The non-compliant issues were raised with the auditee. Route risk assessment to three mines wasn't approved by the transporter's management. During the revisit it was noted that it was done.

Three non-conformances were observed.

- (1) The certificate from the South African Transport Education Training Authority that have lapsed and transporter awaits renewal certificate. Certificates received and contents noted.
- (2) The roles and responsibilities of the role players, stakeholders, and emergency service on the various routes were not informed of these duties.
- (3) No proof was available that the emergency equipment in the 13 satellite emergency trailers has been checked in the last 24 months.

This is the duty of Sasol as the trailer and the equipment belongs to them and they take ownership thereof. This is however the responsibility of the transporter to ensure that it has been done and that the equipment is available in the event of an emergency situation. During the re-visit it was noted that item 1 and 2 have been attended to. Item 3 was substantial compliant as proof of 5 trailers could be presented. Due to the responsible contracted covid 19 the checking of the equipment in the remaining 8 trailers will be checked in the near future. The equipment in the remaining emergency trailers was checked and copies of completed checklists were presented as proof that checking thereof was done.

During the past three (3) years audit cycle (2018 – 2021) this operation haven't experienced any cyanide incidents, vehicle accidents where cyanide was transported, product exposures, consignor or consignee's complaints or compliance reported.

Both the two truck tractor owners each bought three brand new truck tractors which is been put in service for the pulling of the dedicated cyanide road tankers. Owner vehicles were found to have been serviced at intervals as per their respective vehicle maintenance programme. The same apply to the road tankers belonging to Tanker Services. Mandatory inspections were done and these tankers conform to the requirements as per South African National Standard code of practice number 1518 and other National legislative requirements.

Pre-trip checks on vehicles are done by the drivers with the Operations Clerk verifies the findings noted. Additional to this, the Transporter appointed an employee (Inspector) with the explicit duty to check the conformance of the drivers as well as the vehicles prior from leaving the Vanderbijlpark depot. Checks are done based on a pre-compiled checklist onto which his findings are recorded. Any defect noted by either the driver or the Inspector is recorded as per pre-departure checklist where after which a "Defect report" and then a job card is generated and defect rectified. Only after this is done the driver is allowed to leave the depot.

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Audit Company: Private

E-mail: <u>tommieb.muller@gmail,com</u>

Auditor: Tommie Müller

Name and Signature of Transportation Auditor:

Name: Tommie Müller Signature: ... Date: 16/11/2021 ....

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 I 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.

Signed: Tommie Müller Auditor: . \_\_\_\_\_ Date: 21/03/2022 ....

Signature Lead Auditor

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### 1. TRANSPORT: Transport cyanide in a manner that minimizes the potential for accidents and releases.

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

#### X in full compliance

The operation is in substantial compliance with Transport Practice 1.1

not in compliance

Summarize the basis for this Finding/Deficiencies Identified:

Tanker Services have renegotiated a transport contract with the manufacturer (Sasol) for the transport of liquid cyanide and such contract has subsequently been approved.

Procedure for Route Risk Assessments is in place as well as Route Risk Assessment guidelines. All route risk assessments on the primary and secondary routes were conducted in accordance to the transporter's procedure and guidelines. Route Risk Assessments (RRA) to three new clients were concluded and approved by transporter's senior management .

In accordance to the contractual agreement with Tanker Services, Sasol's responsibility for conducting and or reviewing of risks on the existing / new routes has been withdrawn. This responsibility has now solely been transferred to the transporter.

Route Risk Assessment procedure No. HSE 016 rev. 00 dated 16 Oct 2020 in use and stipulates that that route risk assessments be carried out on an annual basis. Procedure sighted.

Tanker Services operating as an individual transporter is responsible for the conducting of Route Risk Assessments (RRA) of new routes and the reviewing of the existing assessments of all new routes. RRA's were conducted on primary and alternative routes.

RRAs have been revised and updated to cover the approved routes as well as the alternative routes. Assessments found to have been approved by the transporter's management.

The completed route risk assessments indicated that the population density in formal and informal settlements, road surface, condition of road, impact of temperature on road surface, edges of tar roads (for deterioration), inclines adjoining roads, water sources and the possible effect should vehicles need to pull off the road, pitch and grade, and weather conditions were taken into account. Recommended measures to reduce or even eliminate the identified risks are documented in the compiled RRA document.

RRAs are addressed during driver briefing and de-briefing sessions. The contents of the various route risk assessments are made known to the truck drivers through compiled route plans. As part of their briefing sessions and trip sheet documentation the latest Route Risk Assessment is included. During debriefing sessions held with drivers on their return from a delivery, drivers been questioned and getting feedback on route condition from the drivers. Driver's "Briefing and Debriefing" procedures are in place.

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Driver's "Briefing and Debriefing" procedures are in place. During de-briefing sessions feedback on risks noted by drivers, this issue been discussed with drivers. Comments made by driver, Laurens Matamani and driver Alfred van As was interviewed and confirmed this issue been done during their de-briefing session held. Documents dated 19/10/2021.

The transporter documented the precautionary measures to be taken to address the identified risks on the selected routes.

No "Cyanide Awareness Road Shows" were conducted to inform and update all various relevant stakeholders on the routes with regards to cyanide product info, product awareness, Company's cyanide emergency procedures and their respective roles and responsibilities...

Last cyanide road shows held during September 2017. Product Material Safety Data Sheet (MSDS) and the Company's cyanide emergency procedures and their respective roles and responsibilities were however sent by E-mail correspondence to all the emergency services and role players along the various routes. Emergency Services are urged in these letters to revert their inputs to improve preventative measures. Latters noted.

Escorting of cyanide vehicles not a requirement in South Africa, unless required by consignee. Latter provides the escort service. Travelling with a consignment of cyanide through Zimbabwe, latter's Emergency Management Act (EMA) requires escorting of such consignments whilst on their turf. To comply with legislation, the Consignees in that country, provides these escort services. Currently no cyanide in any form is transported through Zimbabwe.

Transporter entered into contracted with two independent haulage companies as owner drivers for the utilisation of their truck tractors only to transport and deliver the product. The servicing / maintenance of these vehicles is the responsibility of the owners. The truck drivers are appropriately licensed to operate the vehicles. All the relevant training requirements for the transportation of liquid cyanide, presented. Drivers are managed by Tanker Services as if they are Company's employees. The road tankers are owned, maintained and licensed by Tanker Services. The shipment of liquid cyanide is covered by the Service Level Agreement (SLA) between the two owners drivers and Tankers Services.

The Transporter retains full responsibility of the transport operation and the only function for the owner driver is the operating of the truck tractors and the transporting of the product from Consignor to Consignee's premises. This operation is covered by the Service Level Agreement (SLA) between the two parties.

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.

#### X in full compliance

The operation is in substantial compliance with Transport Practice 1.2

not in compliance

Summarize the basis for this Finding/Deficiencies Identified:

As per South African legislation, drivers employed as dangerous goods drivers, must be a minimum age of 25 years, in possession of a valid EC (extra heavy) code driver's license

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and must be medically fit for the duty and in possession of a valid Professional Driving Permit (PrDP) with category "D" licence. Drivers older than 55 years medically examined twice per year.

Documentary evidence indicated that all drivers are legally licensed as Category "D" (Dangerous Goods) and general goods "G" drivers. Professional Driving Permit with category "D" (PrDP- D) licences need to be renewed every two years. All drivers do conform to these requirements. Dangerous goods training for drivers transporting classified goods are required to attend and pass dangerous goods training course (practical and theoretical) which must be presented by and approved and registered training institution approved by Government.

Drivers have attended and passed their dangerous goods training course as required by the South African National Road Traffic Act and the South African Bureau of Standards (SABS) code of practice number SANS 10231:2014. Training of such is an annual requirement by South African law.

Transporter's training facility been approved by the South African Transport Education Training Authority (TETA). Certificate No. TETA 04-128 dated 5/5//2021 and permit expires on 31/12/2022. The trainer, assessor and moderator been re-certified. Document QAFM04 dated 30/10/2020 valid for 3 years. These certificates were noted.

Relevant work required training and legal required training for drivers are documented on an Excel spreadsheet-based training matrix.

Drivers attended theoretical and practical training on each subject. Eight training modules cover Coupling & Un-coupling of tankers, Tanker operating knowledge, Emergency procedures vehicles & cyanide, Load securement tankers, the wearing of PPE, Sodium cyanide first aid, off-loading procedure for cyanide, air padding off-loading system, emergency oxygen inhalator, (medical oxygen) presented to drivers. Training syllabus was noted. Drivers not involved in the loading nor off-loading process. Loading of road tankers done by the Consignor (Sasol in Sasolburg). Training certificates as well as training course material for drivers were sighted. Drivers training matrix updated on subjects presented.

Divers have attended and passed their 2 yearly level 1 basic first aid training course presented by an external service provider. Certificates sighted and found to be valid.

Certain mines require that drivers are trained in the Consignee's off-loading procedures before being permitted to enter the mine and off-loading commences. Training in the off-loading procedures is done annually. Driver training includes cyanide awareness, use of PPE, fire fighting, cyanide first aid and mine off-loading procedures. Planned task observations were carried out on drivers. Documentary proof noted.

All depot maintenance staff has attended a cyanide awareness training session for which proof thereof is available. Documents were noted by auditor.

The Transporter retains full responsibility of the transport operation and the only function for the owner driver is the operating of the truck tractors and the transporting of the product from Consignor to Consignee's premises. This operation is covered by the Service Level Agreement (SLA) between the two parties.

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

#### X in full compliance

The operation is in substantial compliance with Transport Practice 1.3

not in compliance

Summarize the basis for this Finding/Deficiencies Identified:
Off-loading procedure stipulates maximum working pressure of 1.8 to 2 bars. Release Valves (RVs) are set at 2.1 bar.

Tanker Services utilises dedicated liquid cyanide bulk road tankers. The road tankers in use are manufactured by a registered tanker builder company in accordance to SANS (South African National Standards) Code 1518 which addresses the basic requirements of chemical tankers design. Manufacturer's road tanker specs were noted.

Regulation 13(1)(b) of the regulation "Vessel under Pressure" under the South African Occupational Health & Safety Act, requires that 3 yearly pressure vessels tests and inspections are conducted by and Authorised Inspection Authority (AIA). Pressure tests and inspections were conducted and certificates issued by Government Authorized Inspection Authority (AIA). Transporter conforms to this legal requirement. The copies of inspection certificates noted to be on file and valid.

Computerised control system installed at Consignor's loading gantry to ensure that mass ordered is loaded. A loading probe is fitted on each product compartment of the road tanker and set according to the compartment's loading capacity, thus to prevent it from overloading with product. The loading of the road tankers is performed by the Consignor's loading gantry staff using a closed circuit. Once loaded, vehicle and product goes over a Consignor's weigh bridge and gets weighed axle by axle. This is to prevent vehicle to be over and under loaded. Should it be found tanker to be overloaded or under loaded, the weigh bridge system will not print a weigh bridge certificate. Driver is then referred back to loading gantry for the product discrepancy to be rectified. Weigh bridge calibrated every 2 years. Weigh bridge verification certificate No. 0163 expires 29/10/2022. Certificate noted.

At Consignee's facility the liquid cyanide is off-loaded into their holding tanks. The off-loading process is done through bottom off-loading of product. The off-loading procedures stipulates that prior to off-loading the cyanide, the tanker compartment is to be pressurised to a maximum pressure of 3 bar. The design pressure of each road tankers is 10 bar.

The company is in possession of these technical specification covering tank design, type, tare weight, weight distribution, coupling height and dimensions. Currently 18 road tankers are in use and to date no new cyanide tankers have been purchased.

Currently 18 road tankers are available. Capacity varies from 24 tons to 32 tons. 17 of these road tankers are in use with 1 as been a relief tanker on standby. At the time of the audit no new cyanide tankers have been purchased.

Truck tractors and the under carriage of the road tankers transporting cyanide are serviced at regular intervals immaterial of the kilometres travelled.

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The under carriage of the road tankers are serviced at the transporter's mechanical workshop and the tanks itself serviced by the tank builder company. The servicing of the truck tractors is the responsibility of the owners. Copies of services been carried out on truck tractors are required by transporter. Every six months the Tanker Services workshop foreman carries out a visual inspection on the truck tractors to ensure compliance.

Daily pre-trip vehicle inspections are carried out by drivers to ensure vehicle is fit to be used. Secondary inspection carried out prior to departure done by Transport Inspector. Findings are documented and kept at the office of the Operations department for audit or reference purposes.

The loading gantry at Sasol is fitted with a computerised control system which ensures that mass is loaded into the road tanker as ordered. Before vehicle is allowed to depart onto the road, vehicle is weighed on the Sasol premises. If found to be over- or under loaded, the system will not print a release weigh bridge certificate. Driver is then referred back to loading gantry for the mass to be rectified. Vehicle gets weighed axle by axle. Weigh bridge calibrated every 2 years. Calibration certificate found to be valid.

Transporter does not make use of sub-contractors. Elements 1.301 to 1.303 are applicable to the owner drivers who are operators in their own right. The Transporter retains full responsibility of the transport operation and the only function for the owner driver is the operating of the truck tractors and the transporting of the product from Consignor to Consignee's premises. This operation is covered by the Service Level Agreement (SLA) between the two parties.

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

#### X in full compliance

The operation is in substantial compliance with Transport Practice 1.4

not in compliance

Summarize the basis for this Finding/Deficiencies Identified:

Maintenance procedures found to be in place. Documentary evidence that statutory inspections of tractor units and road tanks were carried out and available on file. Copies of Certificate of Fitness (COF's) available and sighted. Legislation in South Africa has been amended that makes provision that a transporter's vehicles, besides all the other legislative requirements for the transportation of classified goods, need to be annually certified by the local Fire Prevention Officer as suitable to carry certified goods. This is applicable for the truck tractor as well as the trailer / road tanker. Latter issued Dangerous Goods Certificate for each of the fleet units that will be used for this purpose. Dangerous Goods Certificates displayed on road tankers No. BJ 53 HY GP, BJ 53 LL GP and BJ 41 MK GP and Truck Tractors FP DZ 23 TV and HDS 435 FS. Certificates noted.

Cyanide is transported in dedicated pressure vessels (Bulk Tankers) which conform to the South African Standard code of practice, South African National Standard (SANS) code 1518. In terms of South African legislation pressure vessel are to be subjected to pressure tests every 3 years or whenever required. These tests were done by an accredited company and certificates reflecting the outcome were issued and found to be on file.

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Transport signage format and styling is dictated by South African Road Traffic Act, Act 93 of 1996 and the South African Bureau of Standards (SABS) Codes of Practice, South African National Standard (SANS) code 10231; 2019 Ed 4.2 Tankers only travel within National borders of the RSA. Document "Vehicle Daily Pre-start Checklist" in use and signage on tankers and orange diamond on front of truck tractor's cab are part of the items on the checklist that is to be checked prior to leaving the depot. These checks are done by driver prior to departure. During site walk-about the signage displayed on vehicles was checked and found to be in compliance to the legislation. The format, styling and printed detail on the placarding was found to be in accordance to the SANS code of practice 10231:2019 Ed 4.2.

Placarding conform to the legal requirements. Correct product UN number, the transporters telephone number, the specialist advice telephone number and product hazard decal displayed on placard. Noted tanker placards been fitted on left, right and rear of the road tanker. Orange diamond fitted to the front of the truck tractor.

At consignor's premises the format and layout of the placards are checked as part of their vehicle inspection and access procedure. Before access to end users premises is allowed, consignees conduct verifying checks (pre-entry at mine inspection checklist). Signage such as "No smoking", "No open flames" and "No cell phones allowed" permanently displayed on road tankers. Placards found to be clean, clearly visible with no defect visible.

Pre-trip checklist is done by driver prior to departure from Depot. Document "Vehicle Daily Pre-start Checklist" in use and all relevant signage are checked prior to leaving the depot.

Dedicated road tankers are used for the transportation of cyanide. At random checks on vehicles and placards are conducted by Transport Controllers. Findings documented on Pre-trip checklist. In a case where a defect is noted, a "Vehicle Repair Voucher" is generated and vehicle is directed to workshop for repairs where a job card is generated. Once defect has been repaired driver and workshop foreman endorses the "vehicle repair voucher" as well as the "Job card" as proof that defect have been attended to. Only then vehicle will be allowed to depart from the *depot*.

Tanker Services compiled a vehicle preventative maintenance manual for the servicing and service interval of their vehicles as prescribed by their umbrella Company, Imperial Logistics. This procedure manual includes maintenance procedures, workshop instructions, preventative maintenance forms, internal and external audit requirements and documentation. Service intervals for truck tractor and road tanker is every 45 days.

Vehicle maintenance files, record of services carried out and maintenance records were reviewed, as well preventative maintenance forms which included truck tractor service, truck tractor and tanker trip checks. The maintenance records of the owner-drivers vehicles are reported to Tanker Services and these records are incorporated into Tanker Services maintenance database to ensure service intervals are consistent with manufacturer's recommendations. Service records of owner-driver vehicles were noted and found to be up to date. The checking of the vehicle's braking system is included in the service records and noted.

The Company's safety program for cyanide transport includes - Cyanide product knowledge first aid training, oxygen inhaler, cyanide off-loading procedure, operating procedure in cyanide parking area and wearing of Personal Protective Equipment done with all the cyanide drivers. The transporter participates in the SA Road SQAS Transportation program which covers Safety, Health, Environment and Quality. This program consists of 6

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categories namely, (1) Management, (2) Safety, Health Environment, (3) Equipment, (4) Planning & Operations, (5) Security and (6) Site inspections.

Drug & alcohol policy Rev. No. POL-HR-005 rev 9 dated October 2020 stipulate a zero tolerance stance. Any person enters or exit from depot, a compulsory alcohol tests been conducted on all employees & visitors. Breathalyzer meter No. RT 113023 calibrated on 14/5/2021. A copy is also included into their driver's manual. Policy sighted. If during a pre-employment medicals examination traces of alcohol or illegal drugs are noted in blood or urine sample tests, the individual will not be employed. If detected during routine medicals, policy dictates a program of support and counselling before dismissal. Drug abuse forms a part of the on-going rotating safety management program.

Tanker Services has a Drug and Alcohol Abuse Policy statement which prohibits the use, possession, distribution and sale of alcohol/illegal substances. Policy has been revised during 2020 and signed by their Chief Executive Officer (CEO).

Before entering Sasol's premises, including the loading area, drivers are required to be tested for the consumption of alcohol. Any traces noted, how insignificant it may be, the driver is turned away. This principle is also applied at the Consignee's premises.

SHE meetings, toolbox talks, safety stand down, driver's wellness programme, drivers score card on KPI's.

Long distance travel, more than 500 kilometres, compulsory overnight stops determined. Tracking service provider notifies Transporter should driver neglect to stop at pre-determined stopping area. At steep downhill areas, compulsory stop and switch to lowest gear before start descending.

Trip scheduling is done internally using manual planning. South African Labour relations Act requirements stipulates that no more than 15 working hours with 9 hour continuous resting time in a 24 hour cycle must be maintained. Driver Trip Sheet indicates starting time and the time back at the Depot on ending of journey. Trip planning also tracks driver's operating hours, which is backed up by satellite tracking reports.

Preventative maintenance inspections are done on vehicles. Pre-trip checks been conducted on truck tractor and road tanker before vehicle is allowed to leave the depot. First by driver and secondly by so called Transport Inspector. Checklists endorsed by Operations controller. Defects noted, documented and attended to before combination allowed leaving depot. On consignments with duration of two days or more, vehicle checks are performed the following morning and during compulsory stops. Findings documented 7 day checklist. On return to depot, scrutinised by Ops Controller and acts upon entries made..

Road tankers not fitted with baffles. Only full loads transported. 85% = 100%. 15% ullage allowed. Road tankers are not under filled to prevent and minimise surging of product in tanker. Twist locks are fitted on trailers for the transportation of freight containers. These are checked to ensure functionality and that it is intact with freight container.

A procedure was found to be in place that requires that the customer must be notified if a situation arises that renders the necessity to suspend or cease a delivery. After being in consultation with the customer (consignor) the transport controller takes the decision whether consignment must be delivered, no delivery is to be made or driver to pull off the road at a safe stopping area. Driver informs Operations of the stopping area. Re-routing of delivery is also an option but is subjected to prior approval by Depot Manager. This is

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discussed with the driver by Operations Controller. Consignor and Consignee not advised accordingly. Driver allowed ceasing transport if circumstances are of such a nature that is dangerous to proceed. Driver travels up to a safe stopping area where after the Operations Controller is notified of his doing.

Procedure number L1-003 dated 1/10/2020 revision 1 addresses the retention periods for Company documents. These periods are covered in a document called "Document Retention procedure". Procedure No. L1-003 Rev -1 dated April 2019 refers. Retention period of documents stipulates that documents are to be kept for periods that vary between 3 to 40 years, depending on the type of document it might be. The retention of documents such as Proof of Delivery (POD) document, trip sheets, planning sheets, weighbridge ticket, are to be kept for a minimum period of 5 years. Daily vehicle inspection sheets and dangerous goods declarations are kept for a period of 90 days. Records of vehicles and the maintenance done on such vehicle must be kept for the life span of the vehicle. Medical records of drivers are retained for 40 years from exit. Commercial documents are kept for a period of 5 years where after it is sent to Metro File where it is archived. The Metro file system is kept off-site. Records of vehicles kept for live time of vehicle.

The archive was visited and found to have been locked. The facility is of an acceptable standard and do conform to archive standards. Documents from this archive are easy retrievable.

No sub-contractors used for the transportation of cyanide. Tanker Services however retains the full responsibility of the transport operation and the only function for the owner driver is the operating of the truck tractors and the transporting of the product from Consignor to Consignee's premises. This operation is covered by the Service Level Agreement (SLA) between the two parties.

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

#### X in full compliance

The operation is in substantial compliance with Transport Practice 1.5

not in compliance

Summarize the basis for this Finding/Deficiencies Identified:

This section is not applicable as the transporter is not involved in air or sea transport modes.

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

X in full compliance

The operation is in substantial compliance with Transport Practice 1.6

not in compliance

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Summarize the basis for this Finding/Deficiencies Identified:

Truck tractors are fitted with a tracking system (Mix Telemetric) and well as hands free in cab communication devise.

The main means of communication between Operations Officer on duty and the driver is by using the cellular telephone. A Company cellular phone is allocated to the truck driver. The driver do not communicate with the mining operation, cyanide producer unless in the case of an emergency. Any communication is done via the Operations Officer. During walk about mobile phones were noted and checked for functionality. Drivers also have personal cell phones as back-up. Daily trip checklist and briefing session includes checking / verification of cell phone for proper functioning.

Communications black-out areas were considered during the conducting of route risk assessments.

According to the route risk assessment scrutinised, hardly any cell phone blackout areas were noted. However if it does appear to be, alternate arrangements are made which include telephone report-ins at beginning and end of the blackout areas. A procedure with reference Procedure PROC-001-VO dated 28/3/2018 revision 0 clauses 5.1 and 5.2 scrutinised and found to be appropriate. Procedure noted.

Tanker Services Controller at random calls the drivers en route to determine their position and compare that info with the image on the tracking system.

All truck tractors are fitted with a Mix Telematixc Tracking Systems. Device positioned in an office which is 24/7 365 days per year manned. The Satellite Tracking System is used for constant monitoring the movement of the consignment and it is done from the Tanker Services Control Room in Vanderbijlpark. Tracking system pinpoint movement of vehicle minute by minute. System sighted and found to be operative.

The Trip Planning officer submits list of deliveries the day before departure and the tracking company contracted for this, monitors the journeys and checks any deviations from route or route plan. Any deviation is reported to the Operations Controller.

The operability of the tracking system is checked daily and that of the driver's cell phone during briefing session.

After tanker been loaded, six (6) valves situated on top of the tanker and four (4) discharge manifold valves at the bottom of tanker are sealed with a numbered plastic seal. The serial numbers on the seals are documented on transporter's delivery note. Photos of sealed valves are taken. Consignor retains record of the serial numbers fitted. An electrical interconnection device between the park / emergency brake and the switch that activates the butterfly valve fitted in the discharge manifold. Driver has trip sheet, POD, Dangerous Goods Declaration and weighbridge ticket that reflects the mass that was loaded. Consignee checks the volume that is been discharged based on the mass indicated on the POD. Some Consignees weigh vehicles before and after cyanide have been discharged. During stop over areas and at compulsory stopping areas driver checks whether the seals at the bottom of the road tanker are still intact or that on freight containers.

The vehicle carries a Tremcard, the product SDS, a trip sheet, delivery document, and weighbridge ticket. The South African legislation requires is the Tremcard related to the

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product must be available in the vehicle's "dedicated space" (legal specification) and the customer must have a copy of the SDS.

Verified all required documentation available in the designated space inside the cab. An updated SDS for the product was noted inside the designated space. In terms of SA requirements, a SDS and tremcard revision date mustn't be older than 3 years. 'Both tremcard and SDS conformed to this. Verified that a vehicle designated space is affixed to the inside of the cab of the truck tractor as required

No subcontracting is undertaken due to the nature of the cargo and the lack of safety standard by service providers. Tanker Services retain the full responsibility of the operation and the only function of the owner drivers is the transporting of the liquid cyanide from Consignor to Consignee's premises. Requirements verified and found owners drivers do conform to these requirements. This operation is covered by the Service Level Agreement (SLA) between the two parties.

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.

#### X in full compliance

The operation is in substantial compliance with Transport Practice 2.1

not in compliance

Summarize the basis for this Finding/Deficiencies Identified:

Appropriate and relevant symbolic safety signage (skull and cross bone) displayed against the fence as well as the name and the hazard of the product tankers used for transportation. The appropriate symbolic safety signage with regards to the Personal Protective equipment (PPE) required to be worn when entering the fenced-off area displayed at the entrance gate. PPE is physically available in lock-up cupboard next to entrance gate. All relevant safety signage including "No smoking", "No eating / drinking", "No open flames", required personal protective equipment (PPE) safety signage displayed, are clearly displayed, clean and visible from a distance. Signage, as stipulated above, are displayed at all sides of the fenced off area. Signs were noted during visit to the parking area.

The parking area for designated cyanide road tankers is fenced off with at 1.8 meter high fence and entrance and exit gates are fitted with chain and padlocks. These gates are kept locked at all times. Keys are controlled by the security officer on duty. Only the security officers on duty are allowed to unlock the entrance gates. Visitor's register to be completed on entrance and negative breathalyzer test required. Area is patrolled by security staff 24/7, 365 days per year. Security Officer escorts visitors to and inside the parking area.

Valves at primary spillage sump as well as valves on secondary containment area are kept in "close "position at all times. Valves noted. Discharge pump in primary spillage containment area can only be energised from a switch situated on the inside of the fenced

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off area at close proximity from the inside of the entrance gate. Emergency alarm switch available at entrance gate and checked for functionality weekly.

At times when pre-loading of tankers is done, road tankers are parked in a pre-determined and dedicated parking area. This area is fenced off and gates are locked. Access to this area controlled by the Security Officer on duty.

Pre-loaded road tankers occasionally been parked inside the dedicated cyanide tanker parking area which is situated on the premises of Tanker Services. All pre-loaded tankers leave the parking area within a 12 hour period from being parked to deliver product to end users. Parking area is well ventilated as it hasn't got any solid walls.

The entire fence around the parking area was found to be in a very good condition.

No solid cyanide stored at the Depot. Product delivered directly to Sasol's premises.

The entire parking area is so designed and built (after an Environmental Impact Assessment (EIA) was done that in the unwanted event of a leakage, no ground pollution can take place.

In the unlikely event where product leaks out of a loaded road tanker, area slopes towards the primary containment sump which minimise the extent of product loss. Fully equipped spill kit available in the parking area. Primary containment has a capacity is 13 cub meter (15 ton). Secondary containment area has a capacity of 18 ton (15.6 cub meter).

Beneath paving is a thick plastic layer which creates an impervious surface. Any leakage can be contained. Parking area is way away from the area where the other vehicles are parked. No possibility of getting in contact with any other product.

### 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.

#### X in full compliance

The operation is substantial compliance with Transport Practice 3.1

not in compliance

Summarize the basis for this Finding/Deficiencies Identified:

An updated Emergency Preparedness Response Plan (ERP) addressing the procedure for the handling for on- and off-site emergencies available and include an Emergency Response Guide. Emergency Response Plan addresses various emergency scenarios. Off-site response procedure and the Registration Certificate of the Spill Response Company available.

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A list of emergency telephone numbers available and incorporated in the ERP available and displayed where required. Both these documents sighted. The transporter has entered into a contract with Spilltech who is an approved spill responder and cyanide first aid service provider. Spill Tech has been approved by Sasol as a cyanide spill responder for any transportation on route or depot incidents.

Auditor sighted and verified the transporter's off-site response procedure. The revised Emergency Response Plan (ERP) was approved by Company Management..

Fully equipped cyanide emergency trailers were stationed at Harrismith, Upington, Kuruman, Vryburg, Welkom, Potchefstroom, Klerksdorp. This is done due to the lack of municipal emergency services and resources on most of the routes that cyanide is been transported in South Africa. Arrangements have been made with local emergency services to respond to off-site emergency incidents awaiting the arrival of the Tanker Services and Consignor's Spill Response Team.

EMP for describe chemical forms of both solid and liquid cyanide.

Emergency response to cyanide releases associated with transportation is channelled through the Tanker Services Depot where after they activate their Emergency Response Plan for off-site incidents. Appropriate response teams, based upon geographical location and circumstances will be mobilised.

The transporter has a fully equipped Sasol Cyanide Emergency Response Trailer on their premises. The contents of the trailer can be utilised by the Transporter's Emergency Response team for cyanide transportation incidents on route as well for depot incidents.

The ERP prescribes that the equipment in these trailers to be checked on a monthly basis of which the completed checklist to be reverted to Sasol as proof that the equipment have been checked and available and in a operative condition. Due to covid 19 travel restrictions not all the trailers with the equipment could be checked. The Spill Responder's certificate was verified for validation.

Tanker Services will not be directly involved in response as their role during an emergency situation is one of providing a support and assistance when required. The entire emergency situation is handled by Chief Fire Officer of the local Emergency Services in the area where the incident had taken place in conjunction with the Consignor's emergency team. The Tanker Service emergency team is only a support system.

Tanker Services in conjunction with the Consignor scheduled a cyanide emergency drill to be held during last quarter of 2021. At the time of the audit no emergency drill was held.

Road tankers (double axles) are built by an external accredited tanker manufacturer (GRW according to the South African Bureau of Standards, standard SANS code 1518. Single shell tankers with ribs around outer and no baffles been inserted inside tankers. Tankers are also classified as pressure vessels and thus inspected 3 yearly. Shell thickness varies from 6mm to 10mm mild steel and 4.2 mm stainless steel tankers. Tankers are top loading with close circuit system and bottom discharging of product at a 2 bar pressure. Air hose connected to consignee's air supply to pressurise the tanker. Defects noted during the initial AIA inspection on three road tankers, were rectified and compliance certificates issued. Certificates noted.

Only new tyres used on the combination. No recaps used.

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The Emergency Management Plan refers to road transportation of liquid sodium cyanide in bulk format (road tankers) from Consignor (Sasol) to the mines (Consignees).

The Emergency Response Plan identifies the roles and responsibilities of outside responders, medical facilities or communities in emergency response.

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

#### X in full compliance

The operation is in substantial compliance with Transport Practice 3.2

not in compliance

Summarize the basis for this Finding/Deficiencies Identified:

Tanker Services has its own fully authorised and approved training centre with two accredited trainers based at the Vanderbijlpark depot. (TETA Certificate No. TETA 04-128 dated 5/5/2021. Certificate expires 31/12/2022) with one accredited trainers based at the Vanderbijlpark depot. Approval certificates with Ref no. TETA -ASSR Q17-422 AND TETA-MODR 13-8. Certificates available and noted. Attendance registers, training modules, theoretical questionnaires and certificates of drivers/ appropriate personnel noted.

Currently no cyanide awareness sessions presented to medical, emergency staff and traffic officers on route.

Tanker drivers and Hazmat service providers are fully and comprehensively trained at their own training centre. A "Career Development Training Plan" available at the transporter's training centre for the retraining of drivers, etc. Refresher training done annually such as cyanide first aid, dangerous goods, procedures / instruction, cyanide awareness, cyanide plant induction, consignee's mine induction and emergency oxygen inhalator or after an incident has occurred or when need required.

Emergency response to cyanide releases associated with transportation is channelled through Tanker Services Depot where after they activate their Emergency Response Protocol for off-site incidents and who will mobilise the appropriate response teams, based upon geographical location and circumstances. Cyanide emergency response has also been contracted to Spilltech as an approved spill response and cyanide first aid service provider and the Company's spill response company.

Tanker Services utilises their own trained cyanide emergency response team as well as their approved specialised Emergency Response Service Provider. The duty of the Tanker Services cyanide emergency team only act as a first aid measure until the municipal emergency services team or those from the Consignor arrives at the scene. Transporter's emergency team then steps back. Should the municipal emergency team or those from the Consignor request for assistance, transporter's team will then participate in the handling of the spill containment of the cyanide. Spilltech has a fully equipped Cyanide Emergency Response Trailer on their premises. The service provider's functions as a Cyanide Emergency Response team for cyanide transportation incidents or depot incidents.

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Transporter also have a trailer equipped with equipment which can be used in the handling of an on and off site cyanide spillage.

Trailers equipped with cyanide emergency equipment were made available by the manufacturer for the use and control by the municipal emergency services in the event of a cyanide emergency situation. Equipment in all the emergency trailers was checked. Evidence of this was presented by auditee. Auditor found the contents of the completed checklists relevant, appropriate and acceptable.

Every driver has been issued and trained in the use of their personal protective equipment consisting of a protective suit, face shield, eye protection, hard hat, respirator and appropriate canister, yellow gum boots, and PVC gloves.

Refresher training been presented, annually and in certain instances 2 yearly, or after an incident has occurred or when need required. Cyanide first aid, dangerous goods, procedures / instruction information awareness, cyanide plant induction, consignee's mine induction, emergency oxygen inhalator, been presented annually. Two (2) yearly refresher training on fire and general first aid training, Professional Driver's Permit for transporting dangerous goods (PrDP-D).

Tanker Services checks on site emergency response equipment e.g. equipment in emergency trailer, fire extinguishers, first aid contents, spill kits and safety showers. Checklists noted by auditor who verified and found checks have been performed on a monthly basis.

During site inspection drivers Alfred van As and Laurens Matamani were interviewed on the fitting and wearing of the full face mask. Both these drivers were found to be fully conversant on when and how to use it and capable in fitting the mask correctly. Proof of training noted on driver's file.

Depot staff will raise the alarm and evacuate, allowing Spilltech to handle situation. Spilltech are capable to respond within 10 minutes from receiving a telephone call. Spilltech have a Sasol cyanide emergency response trailer at their premises. The Workshop staffs are the only possible cyanide source (abnormal maintenance scenarios) and maintenance staff all received cyanide awareness training.

No sub-contractors for the transportation of cyanide in use. Truck tractors utilised owned by owner drivers. Tanker Services retain the full responsibility of the transport operation.

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

#### X in full compliance

The operation is in substantial compliance with Transport Practice 3.3

not in compliance

Summarize the basis for this Finding/Deficiencies Identified:

A written plan for dealing with on-site and off-site emergencies currently in use. SQAS Ref No 2.1.3.1 refers

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The transporter has a protocol which stipulates who should be contacted in the case of any transport related incident. SQAS Ref No. 2.1.3.2f "list of the different parties to be informed" with their contact details (customers, authorities, etc) refers. Proof of aforementioned document and the reporting notices, were noted by the auditor.

Transporter do have a list of emergency telephone numbers which is available at Depot's reception, with the Depot Manager, the Operations Control office, Tanker Services Safety Officer and the Consignor's Call Centre. Tanker Services Cyanide Emergency Procedure includes updated contact information for medical, fire and emergency authorities, spill response and clean up service providers, regulatory notification contacts, Consignor's Call Centre and Tanker Services 24 hour control room.

Tanker Services have formally appointed employee as an Emergency Controller of which one of his duties is to keep the emergency contact telephone list updated. Appointment and updated emergency reaction plan been noted.

Transporter have formally appointed one of their employees as an Emergency Controller of which some of his duties is to keep the emergency contact telephone list updated and to submit reports to Governmental Authorities. ERP been updated yearly. Plan contains list of emergency telephone numbers. Document noted.

"En-route / Onsite / Departure Response" procedure sighted.

Documented procedure with SQAS reference No. 1.2.1.1 in place for recording and investigating non-conformances / Accidents / Incidents. South African National Environmental Management Act requires that any spillage of a chemical must be reported to the Department of Environmental Affairs.

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

#### X in full compliance

The operation is in substantial compliance with Transport Practice 3.4

not in compliance

Summarize the basis for this Finding/Deficiencies Identified:

Transporter has entered into a Service Level Agreement (SLA) with Spilltech signed on 29/3/2021, an approved spill response service. A Service Level Agreement document noted. Spill Clean-up company been tasked with the recovery or neutralization of solutions or solids, decontamination of soils or other contaminated media and management and/or disposal of spill cleanup debris.

Remediation procedures are applied by Spilltech (a spill clean-up company) which are based on South African National requirements. Spilltech uses the Tanker Services procedures for clean up which include prohibitions of the use of certain chemicals to treat cyanide spillage near surface water.

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EAP - Spillage of liquid cyanide in cyanide yard, Number FORM - HSE - 027 rev 1 dated July 2020 paragraph " special instructions" on page 2 clearly prohibits the use of chemicals such as sodium hypochlorite, ferrous sulfate and hydrogen peroxide to treat cyanide that has been released into surface water. Similar prohibition noted in Document no. FORM - HSE - 025 rev 1 dated July 2020 section "special instructions" sub-clause 4 on page 1 of 1 with regards to spillages of liquid cyanide spilt while travelling on road.

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

#### X in full compliance

The operation is in substantial compliance with Transport Practice 3.5

not in compliance

Summarize the basis for this Finding/Deficiencies Identified:

The Emergency Management Plan (EMP) (Procedure PR.HSE.019dd 15/8/2017 Rev No. 2 stipulates that reviews of documentation be done at least once per year or after a significant incident or after a mock drill.

Due to covid 19 National Emergency Lockdown as announce by the RSA Government an off-site office mock emergency drill was held. The scenario was that the driver struck a pothole in the road and the impact resulted that the road tanker dislodged from the truck tractor and dropped to ground level with the result that the main off-loading valve got damaged and a small volume of Cyanide spilt on the ground with product continued dripping out.

The purpose of such drill is to evaluate the emergency response of the stakeholders, their competency, to identify any short falls in the procedure and to implement improvements / remedial actions to the EMP.

End of report.

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