INTERNATIONAL CYANIDE MANAGEMENT INSTITUTE

Transportation Summary Certification Audit Report

Tanker Services Specialised Products Division Vanderbijlpark, South Africa

12th – 14th October 2011

For the International Cyanide Management Code

Signature Lead Auditor 10th December 2011

Name of Operation:	Tanker Services Specialised Products
Name of Operation Owner:	Imperial Holdings
Name of Operation Operator:	Imperial Logistics
Name of Responsible Manager:	Mr. Sheresh Wellcome
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Location detail and description of operation:
The Depot that deals with the transport of cyanide is situated at 30 Fairbanks Road, Vanderbijlpark, Gauteng Province, South Africa.

Tanker Services Specialised Products mainly transports Sasol products which include sodium cyanide solution, hydrochloric acid, sodium hydroxide solution, sodium hypochlorite solution and anhydrous ammonia, ammonium nitrate prills and polyvinyl chloride.

The operation took over the transportation of sodium cyanide solution from the Sasol subsidiary, SiLog, in June 2011. In terms of the business agreement, all of the dedicated bulk liquid cyanide tankers were taken over by Tanker Services Specialised Products, including the drivers, tractors, owner-driven tractors and their associated operating and maintenance records and documentation. Prior to the change, SiLog was an ICMI-certified cyanide transporter.

The sodium cyanide solution tankers are currently based at the Sasol Silog premises in Sasolburg and they are directly dispatched from there to the various off-loading points at the gold mines after loading.

Only empty Sodium cyanide tankers will enter the Vanderbijlpark Depot for refueling and documentation collection. No cyanide tankers are currently stored at the Depot.

When the tankers require maintenance they are decontaminated by Sasol Silog at a Decontamination Bay located inside the Sasol Polymers Cyanide 1 and 2 plants (ICMI-certified producer) prior to any work being carried out.

Auditor's Finding

This operation is

X in full compliance
☐ in substantial compliance *(see below)
☐ not in compliance

with the International Cyanide Management Code.

Audit Company: Eagle Environmental Audit Team Leader: Arend Hoogervorst

E-mail: arend@eagleenv.co.za

Name and Signature of Transportation Auditor:

Name Lynton Brown Signature LMBrown Date 13th December 2011

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.

Date of audit: 12th -14th October 2011

Signed

13th December 2011

Arend Hoogervorst Lead Auditor Date

Signature Lead Auditor 10th December 2011

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 with

Summarize the basis for this Finding/Deficiencies Identified:
All 65 Sasol cyanide customer route risk assessments, prepared by Johan Van Wyk of Sasol, have been taken over from SiLog. Sighted RRA Register. A new Route Risk Assessment Guideline document (based upon the Sasol model) in Tanker Services format is in place. The route risk assessments evaluate population density and formal and informal settlements, road surface, condition of road, impact of temperature on road surface, edges of tar roads (for deterioration), inclines adjoining roads and the possible effect should vehicles need to pull off the road, pitch and grade, and weather conditions. The truck driver receives the latest route risk assessment as a part of his trip sheet documentation. Driver Briefing and Debriefing procedures are in place, as is a briefing flowchart prompting for updated information on the routes from drivers. Cyanide producer, Sasol, conducts "Road shows" approximately two yearly, in conjunction with transporters and mines to inform and update stakeholders on different routes, cyanide awareness, and associated emergency response provisions. Tanker Services have taken over the SiLog cyanide subcontracted hauliers. Contracts have been renegotiated. Haulier sub-contracts do not specifically refer to Cyanide Code compliance. However, a work instruction has been issued to require Code compliance from hauliers, as applicable.

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 with

The operation is □ in substantial compliance **with Transport Practice 1.2**

□ not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:
Drivers are required to be legally licensed as D Dangerous Goods Drivers, renewed every two years. Medical and dangerous goods training is required annually. Training and legal requirements for drivers are included in an Excel spreadsheet-based training matrix. Certain mines require that drivers are trained in off-loading procedures annually before

being permitted to enter the mine and off-load. Driver training includes cyanide awareness, use of PPE, fire fighting, cyanide first aid and mine off-loading procedures. All depot maintenance staff are trained in cyanide awareness.

Transport 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 Transport Practice 1.3**

□ not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:
Tanker Services has taken over SiLog's dedicated liquid cyanide bulk tankers. These Tankers are manufactured according to SANS (South African National Standards) Code 1518 which covers basic chemical tanker design. The company has a technical specification covering tank design, type, tare weight, weight distribution, coupling height and dimensions. No new cyanide tankers have been purchased to date and use is being made of the 15 cyanide tanker fleet taken over from SiLog. Vehicles go over the Sasol weighbridge to check vehicles loads. The weighbridge is programmed not to print weighbridge ticket if the load is above the legal ticket limit. (Tankers are registered individually on the weighbridge system.) Dedicated cyanide loading points and dedicated cyanide tankers are used. Loading booms have probes fitted which ensure that tankers are not loaded beyond a designated point.

Transport 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 Transport Practice 1.4**

□ not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:
Cyanide is transported in dedicated pressure vessels (Bulk Tankers) which conform to the SANS code 1518. Signage format and styling is dictated by the South African Road Traffic Act and SANS Codes of Practice and meets UN standards. Tanker Services uses its parent company maintenance manual, the Imperial Logistics Maintenance Procedure Manual, which includes maintenance procedures, workshop instructions, preventative maintenance forms, and internal audit requirements and documentation. Vehicle maintenance files including service and maintenance records were reviewed, as were preventative maintenance forms which included truck tractor and rigid service, truck tractor, rigid, trailer trip check, and hazardous pressure vessel service. The maintenance regimes of the owner/drivers vehicles are reported to Tanker Services. Tanker Services

have taken over the SiLog cyanide subcontracted hauliers. Contracts have been renegotiated. Sub-contracted Haulier service records are incorporated into Tanker Services maintenance database to ensure service intervals are consistent with manufacturers recommendations. Trip scheduling is done internally using manual planning. In the commercial contract, there is a limitation of 14 hours per day. The legal status is that drivers may not drive more than 72 hours per week. Driver Trip sheet indicates start and finish of journeys. Trip planning also tracks driver's operating times, which is backed up by satellite tracking. Cyanide Planning documentation is submitted to the satellite tracking company which monitors trips and reports deviations. Information on weather and road conditions is provided by the national weather service, the Road Freight Association and Sasol. Tanker Services has a Drug and Alcohol Abuse Policy statement which prohibits use, possession, distribution and sale of alcohol/illegal drugs. Everyone entering the depot is required to take an alcohol breathalyser test which must be negative to permit entry onto site. If pre-employment medicals detect alcohol or illegal drugs, 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 and will be highlighted in a focussed campaign if an incident or issue arises.

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

□ in full compliance with

The operation is □ in substantial compliance **with Transport Practice 1.5**

□ not in compliance with

X Not applicable

Summarize the basis for this Finding/Deficiencies Identified:
This section is not applicable as no modes of air or sea transport are used.

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

X 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:
The main means of communication between driver and transport company is via cell phone. The driver does not communicate with the mining operation, cyanide producer or emergency responder. A Company cell phone is allocated to the truck. Drivers also have personal cell phones as back-up. Daily trip checklist includes check/verification of cell

phone functioning. Communications blackout areas are identified via the route risk assessments, where they exist. In such cases, alternate arrangements are made which include telephone report-ins at beginning and end of the blackout area and escort of vehicles through blackout areas. A Satellite Tracking System is used. The Trip Planner submits a list of deliveries the day before and the tracking company monitors journeys and checks any deviations from route or route plan with the driver and the controller. The vehicle carries a Tremcard, trip sheet, delivery document, and weighbridge ticket. The South African legal requirement is that a Tremcard must be available in the vehicle "dedicated space" (legal specification) and the customer must have a copy of the MSDS.

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 with

The operation is □ in substantial compliance **with Transport Practice 2.1**

□ not in compliance with

X Not applicable

Summarize the basis for this Finding/Deficiencies Identified:
There is no interim storage. Tankers are filled at the Sasol cyanide plant and moved to the adjoining dedicated cyanide tanker park. Within a few hours, the tanker is collected and delivered to the customer.

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 with

The operation is □ in substantial compliance **with Transport Practice 3.1**

□ not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:
Tanker Services has a Spillage/ Accident/Incident/Contamination/ Regulatory Compliance/ En-Route/ On-site/ Depot Response Procedure. Emergency response to cyanide releases associated with transportation are channelled through Sasol where they are dealt with using the Sasol Emergency Response Protocol for Supply Chain Transportation and Offsite Incidents. Cyanide emergency response has also been contracted to IFRT, a spill response and cyanide first aid service provider, as a backup. IFRT is a Sasol-approved cyanide emergency service provider and has a Sasol Cyanide Emergency Response Trailer on its premises. The service provider functions as a Cyanide Emergency Response team for cyanide transportation incidents or depot incidents. Sasol uses its own cyanide emergency responders and approved specialised Emergency Response Service Providers and has established "Road Shows" to facilitate communication with stakeholders on emergency response procedures and practices and drills and exercises. The plan is appropriate because any incident on any transportation route is channelled through Sasol, who will mobilise the appropriate response teams, based upon geographical location and circumstances. Tanker Services will not be directly involved in response (i.e. equipment or manpower) but will cooperate and respond to requests from Sasol. Sasol only produces liquid cyanide for its South African customers and Tanker Services only transports liquid cyanide in dedicated bulk tankers along prescribed routes. The bulk tankers are a standard design (according to SANS Codes of Practice). However, response vehicles are equipped to handle different transport types such as top, bottom, or side loading.

Transport 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 Transport Practice 3.2**

□ not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:
The emergency response service provider, IFRT, have been trained in cyanide awareness, cyanide first aid and emergency response by Sasol. Training is refreshed annually. Emergency response to cyanide releases associated with transportation are channelled through Sasol where they are dealt with using the Sasol Emergency Response Protocol for Supply Chain Transportation and Offsite Incidents. Any incident on any transportation route is channelled through Sasol, who will mobilise the appropriate response teams, based upon geographical location and circumstances. Tanker Services does not have its own cyanide emergency response equipment but makes use of the service providers (IFRT). Every driver has a protective suit, face shield, eye protection, hard hat, respirator and appropriate canister, yellow gum boots, and PVC gloves. Depot staff will raise the alarm and evacuate, allowing IFRT to handle situation. IFRT will respond in 10 minutes. IFRT have a Sasol cyanide emergency response trailer at their premises. The Workshop is currently the only possible cyanide source (abnormal

maintenance scenarios) and maintenance staff are all cyanide awareness trained. A Desktop scenario drill is planned with Sasol and other key stakeholders to test current appropriate response and add any identified improvements.

Transport 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 Transport Practice 3.3**

□ not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:
The 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, and Sasol and Tanker Services 24 hour control rooms.

Transport 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 Transport Practice 3.4**

□ not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:
Remediation procedures are applied by IFRT which are based upon Sasol training and requirements in the Sasol Emergency Response Plan. IFRT uses Sasol procedures for clean up which include prohibitions of the use of cyanide treatment chemicals near surface water.

Transport 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 Transport Practice 3.5**

□ not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:
The Document Review procedure requires that the Plan be reviewed annually or after a significant incident or after a mock drill. A depot-based desktop scenario drill is planned

on 8th December, with Sasol and other key stakeholders, to test current appropriate response and add any identified improvements.