

***INTERNATIONAL CYANIDE
MANAGEMENT INSTITUTE***

***Transportation Summary
Certification Audit Report***

***BIDVEST INTERNATIONAL
LOGISTICS – ROAD FREIGHT
PINETOWN
SOUTH AFRICA***

2nd – 3rd September 2020

***For the
International Cyanide Management Code***



Name of Operation: Road Freight Division

Name of Operation Owner: Bidvest International Logistics

Name of Operation Operator: KZC – KwaZulu Natal Container Dept

Name of Responsible Manager: Ms Taryn Wenlock, Road Freight (RF) Safety, Health, Environment, Risk & Quality (SHERQ) Manager

Address: 25 Goodwood Road, Westmead Ext., Pinetown, 3608, KwaZulu-Natal

Country: South Africa

Telephone: +27(0)87 1585 616 / +27(0)82 4989 350

Fax: n/a

E-Mail: TarynW@bidvestil.com

Location detail and description of operation:

Bidvest International Logistics (BIL) Road Freight Division's main KZN operations are based at 25 Goodwood Road, Westmead Extension, Pinetown.

BIL is certified in the transportation of hazardous and non-hazardous cargo for local and long-haul operations and is SQAS (Safety and Quality Assessment for Sustainability) Africa-accredited. BIL have in the past conducted transportation of Sodium Cyanide domestically and across borders in the South African region.

Since the beginning of 2020, BIL has been entrusted to transport Sodium Cyanide in April 2020 and now September 2020 on an ad hoc basis. It is anticipated that these shipments may increase in the future and become part of monthly committed operations.



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 with

The operation is in substantial compliance **with Transport Practice 1.1**
 not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

Bidvest International Logistics (BIL) has drawn up a Route Risk Assessment (RRA) for the transport of solid sodium cyanide briquettes from the Durban Container Terminal – Port of Durban to the client premises in Sasolburg. The RRA includes classifications covering city, urban, and rural situations with specific warning regarding pedestrian and animal risks. The locations are defined by kilometre markers. Further references in the RRA include: - potholes and road condition; conditions of road markings, area-based driver behaviour and road conditions, traffic volumes at various times, incidence of temporary and "permanent" construction and roadworks and type of road covering (tarmac, dirt road or stripped black top). The notes include reference to grade and steepness of hills and sections of road where there are extreme weather conditions, misty conditions or fog and crosswinds. Specific reference to streams and farm dams is also noted.

The RRA procedure requires route risk assessment to be updated at least annually. Verbal feedback is received from drivers, post-trip, and included in subsequent pre-trip driver briefings. Risk mitigation measures are included, such as: reduce speed for down hills or windy conditions, or in inclement weather; stop only in safe stopping areas; observe road speed limits; observe safe travelling distances from other traffic; watch for potholes and changes in road conditions, be aware of animals and pedestrians on the road.

There is no direct consultation with communities currently. However, municipalities along the route have been made aware of the cyanide shipments, specifically relating to a shipment between 4-6 September 2020. Emails written to municipalities notifying them of the September 2020 cyanide shipment were sighted, and some replies have been received. Responses were also received from the Pietermaritzburg Disaster Management Department. The N3 Toll Concession Company notified and confirmed that they have emergency support vehicles on the road constantly. The majority of the cyanide transport route is on the N3 toll highway from Durban to Heidelberg, south of Johannesburg.

Convoys are used for three or more containers. Convoy practices are described in BIL's convoy Procedure. Currently, escorts are not used. Convoy vehicles maintain communication with the Head Office Transport Controller.

BIL liaised with the N3 Toll Road Control Centre covering the road from Hilton to Heidelberg regarding loads. The spill response service provider was notified to be on stand-by during the September 2020 cyanide shipment. Arrangements are in place to contact the Sasol Medical Practitioners (cyanide specialists) if telephonic support is

needed on the road. The Sasol Cyanide Exposure – Emergency Care Protocol (Summary) is available and was sighted. Dangerous Goods Awareness Training attendance registers for various staff and stakeholders was sighted for the Free State, Mpumalanga and Gauteng, and the Midlands and the Berg. The training was provided by a trainer who was previously the Head of Sasol Emergency Services.

Spill Response is handled by a sub-contractor, Spill tech. The Spill tech Emergency Response Procedure was reviewed and found to include: - PPE requirements, Pre-response, Response, Hazardous reactions, Small and large spillages, Post response, First Aid treatment requirements, Links to Sasol Emergency Service Support, Rehabilitation requirements, Precautionary measures, Hazard Identification Risk Assessment and Control, Selection, Training, Competency and Authorisation, Support organisations and Support Services and Records. The procedure includes specific reference to sodium cyanide in solid and liquid form and conforms to Cyanide Code requirements.

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:

The BIL pre-employment criteria for drivers' documents requires drivers to be 25 years and over, have relevant driving experience (Hazardous Goods transport), have a valid South African Code 14 (EC-heavy motor vehicle) license and PrDP (Professional Driving Permit) and 5 years' experience. They are required to undergo a numeracy and literacy test, be credit checked, be drug-free, undergo a criminal record check, provide a previous driver employment reference, undergo a pre-employment medical specifically for Dangerous Goods Transportation, and undergo a driving assessment test. These requirements are also included in the Transport Management Plan (TMP). BIL has a pool of 10 drivers that are utilised in the transportation of the Cyanide freight containers. Drivers who have not been trained in cyanide may not drive a vehicle transporting cyanide freight containers.

Drivers transporting cyanide undergo training which includes: - cyanide and South African Hazardous good documentation ("Orange Box"), 24-hour control room operation, route risk assessments, use of the "Get out alive" kit (Personal Protective Equipment - PPE), a desktop exercise on the application and use of PPE, breakdown support, pre-departure vehicle checklists, the "Buddy System", maintenance of trip sheet and self-debrief for end of shift, emergency procedure including antidote use, and Municipality awareness. Cyanide-related training is refreshed on acceptance of every cyanide transport consignment.



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:

Equipment used for the transportation of dangerous goods must comply with the provisions of SANS (South African National Standard) 1518 for construction and SANS 10231 for repairs and maintenance. BIL equipment conforms to these standards. These requirements are included in the Fleet Maintenance Manual.

The load configuration procedure includes only one cyanide trailer on the heavy vehicle combination, which is below the maximum load specification for the equipment. Thus, no more than one cyanide container may be carried on any trailer. Furthermore, in the TMP, it is stated that it is forbidden to load more than one cyanide container on a trailer. IN BIL Container Collections Procedure 1, it states, "Only one freight container of cyanide to be loaded on the heavy vehicle combo...". It is also stated in the BIL Container Collections Procedure that, "...Only one freight container of cyanide to be loaded on the heavy vehicle combo..."

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:

The Transporter receives 20 ton, 6-metre containers, pre-packed and sealed by the Cyanide Producer at source. Seals are inspected during transport. In the Driver's Manual, Section 36, the Dangerous Goods Vehicle Marking Chart indicates the South African legal requirements for position and numbers of danger warning diamond signs, and placarding under IMDG (International Maritime Dangerous Goods) regulations covering the UN substance number, goods identification rectangle adjacent to the hazard warning diamond, followed by subsidiary risk diamonds.

There is a Transport Management Plan (TMP) in place which details actions relating to safety, health and environment covering the transport of sodium cyanide. Completed vehicle and trailer pre-trip inspection checklists were sighted and reviewed. The TMP also includes a section on driver working hours: maximum 15 hours on duty; drivers can drive up to 14 hours but only 5 hours continuous driving before a break of 15 minutes.

The Transport Modification procedure contains instructions in the event of modification to routes caused by inclement weather or civil unrest. The Fleet Maintenance Manual includes a section on preventative maintenance which is applied to trucks and trailers carrying cyanide.

BIL has policies in place covering alcohol in the workplace and substance use.

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

X in full compliance with

The operation is in substantial compliance **with Transport Practice 1.5**
 not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The transporter only transports solid cyanide by road and not by sea or air; thus, this section is not applicable, and therefore in full compliance.

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:

Communication is via cell phone/mobile phone. A Communication Procedure defines all communication between drivers and their controllers. Drivers phones are checked with the Transport Controller. Drivers' cell phones can be charged in cabs and must always be kept charged. BIL provides airtime for drivers' cell phones. A check of drivers' phones is included in the briefing checklist under procedure 2.

BIL uses a real-time tracking system which in turn uses cell phone technology. Controllers can track the movement of a cyanide shipment in real-time, including when the vehicle stops and starts and if it deviates from its agreed route. The tracking service provider sends daily Health Status reports on the status of all vehicle tracking units. No communication blackout areas exist on the cyanide transport route due to the cell phone technology coverage.

Full shipping records are carried with the shipment showing the amount of cyanide being transported and the Safety Data Sheets. The range of documents sighted for the April and September 2020 cyanide shipments included: - Bills of Lading, Certificates of Origin, Certificates of Analysis, Arrival Advices, Importers Clearing and Forwarding Instructions, Producer invoices and packing lists, collection and delivery sign-off notes, and full 16-point producer's Material Safety Data Sheets for the transported solid sodium cyanide briquettes.



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

Summarize the basis for this Finding/Deficiencies Identified:

The transporter takes the solid sodium cyanide in Shipping containers from Durban Container Terminal – Port of Durban, directly to the client and therefore there is no interim storage or trans-shipping depots. Thus, this section is not applicable, and therefore in full compliance.

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:

BIL has a Cyanide Emergency Plan which needs to be read in conjunction with the Driver's Manual and the Spill tech (Spill emergency response sub-contractor) Emergency Cyanide Response Procedure. The documents identify response actions for cyanide exposures and cyanide incidents that might occur along the transportation route.

The Plan identifies the responsibilities of the Lead Driver, Transport Controller, other truck drivers and the service providers (Spill tech), the BIL Cyanide Specialist, Emergency Services, Police, and Ambulance and Hospital facilities. Similarly, the Spill tech Emergency Cyanide Response Procedure includes task requirements of the Spill tech trained staff.



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:

Only designated and trained drivers may drive a cyanide shipment. These drivers are trained in the cyanide emergency response plan. Emergency response duties and responsibilities are listed for the Lead Driver, the Transport Controller, other Truck drivers, and the Spill tech Emergency Response Service Provider.

The Driver's "Get Out Alive" kit inventory list is included in the BIL Cyanide Emergency Response Plan. The Spill tech Cyanide Response Procedure does not include a specific inventory list, but the company has a series of nationwide, strategically located depots which contain equipment for all chemical spills and incidents, including cyanide. Spill tech units dispatched to a cyanide emergency will be equipped to handle the emergency, based upon the requirements of the reported incident.

The BIL Driver "Get out Alive" kit includes: - PVC overalls, safety boots, wellington boots, high Viz vest, first aid kit, hard hat, respirator, filter, long heavy-duty PVC gloves, disposal bag and cable tie. Ten kits are available for the ten cyanide trained drivers. The "Get Out Alive" kits are checked by the BIL Road Freight SHERQ Manager personally before they are issued to the Cyanide drivers. The kits are returned to the BIL Road Freight SHERQ Manager at the end of the cyanide shipment. Currently, cyanide shipments are on an ad hoc basis, and refresher training for the ten drivers is conducted before every shipment. Attendance registers for driver emergency training for the September shipment, held on 1 September 2020, was sighted.

BIL subcontracts Spill tech to clean up cyanide spillages and respond to cyanide incidents and accidents. Roles and responsibilities are covered in the Spill tech contract and the Spill tech Emergency Cyanide Response Procedure. BIL has required Spill tech to comply with Cyanide Code requirements.

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 Cyanide Emergency Response Plan includes a Table of Contacts for drivers covering primary and secondary contacts, and a Communications Matrix for the Transport Controller, listing contact names, positions, cell numbers, circumstances to contact, and forms of contact (i.e. cell, email, WhatsApp). The Driver's Emergency Procedure lists actions and contacts and sequence of actions to be taken in the event of an emergency and a Transport Controller's procedure to be followed after an accident/ incident/ spill/ hijacking including activities and sequence of activities including contacts. The contact details are updated every three months.

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 and clean-up are sub-contracted to Spill tech, including recovery or neutralization of solutions or solids, decontamination of soils or other contaminated media and management and/or disposal of spill clean-up debris in their Spill tech Cyanide Emergency Response procedure.

The Spill tech Cyanide Emergency Response Procedure requirements state clearly when sodium hypochlorite and ferrous sulphate may and may not be used, especially relating to flowing and still 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 Cyanide Emergency Response documentation is reviewed six-monthly, as per the document review procedure. Emergency response drills are covered in the Plan, and desktop exercises are scheduled to be carried out annually. There is an intent to evaluate the Plan's performance, but it is premature to show results as this is a first certification audit.

