

***INTERNATIONAL CYANIDE
MANAGEMENT INSTITUTE***

***Summary Transportation
Pre-Operational Certification
Audit Report***

***MBH Bulk Haulers
Kempton Park, South Africa***

19th – 21st August 2018

***For The
International Cyanide Management Code***



Name of Operation: MBH Bulk Haulers
Name of Operation Owner: MBH Bulk Haulers
Name of Operation Operator: MBH Bulk Haulers
Name of Responsible Manager: Mike Baker
Chief Executive Officer
Address: 13 Sim Road
Pomona, Kempton Park 1619, Gauteng Province
Country: South Africa
Telephone: +27 (0)72 229 6985
Website: www.mbhbulk.co.za
E-Mail: mike@mbhbulk.co.za

Location detail and description of operation:

MBH BULK is a transport company, based in Pomona, Kempton Park, Gauteng, South Africa, which has been transporting hazardous and non-hazardous solid and liquid goods in Southern Africa since 2008.

MBH BULK provides specialized transportation and associated services for chemicals and explosive companies and mines, optimized payload tanker equipment with specialized approved pumps, and packaged and boxed cargo distribution to various mines and users of explosive products. MBH BULK is certified with the South African Chemical and Allied Industries' Association (CAIA) and is planning to commence cyanide transportation in the near future.

Durban Port Due Diligence

A due diligence exercise relating to cyanide handling will be undertaken at the Durban port and this will be verified by an ICMI Transportation Auditor.

This Pre-Operational Transportation Audit Report will be confirmed through a Completion Report following a verification audit after, and within 6 months of, the first shipment of cyanide by the Transporter.



MBH Bulk Haulers

Signature of Lead Auditor

3rd November 2018

SUMMARY AUDIT REPORT

Auditor's Finding

This operation is

X in full compliance

in substantial compliance *(see below)

not in compliance

with the International Cyanide Management Code.

* For cyanide transportation operations seeking Code certification, the Corrective Action Plan to bring an operation in substantial compliance into full compliance must be enclosed with this Summary Audit Report. The plan must be fully implemented within one year of the date of this audit.

Audit Company: Eagle Environmental

Audit Team Leader: Arend Hoogervorst E-mail: arend@eagleenv.co.za

Names and Signatures of Other Auditors:

Transportation Auditor: Lynton Brown

Signature 

Date of Audit: 19th – 21st August 2018

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 Gold Mine Operations and using standard and accepted practices for health, safety and environmental audits.

MBH Bulk Haulers

Facility

Signature of Lead Auditor

Date 16th November 2018

MBH Bulk Haulers

Signature of Lead Auditor

3rd November 2018

SUMMARY AUDIT REPORT

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.

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

Basis for this Finding/Deficiencies Identified:

The transporter's Policy Statement covers the requirement for route evaluation including route risk assessment requirements for transport routes that minimize the potential for accidents and releases or the potential impacts of accidents and releases. A specific Route Risk Assessment Procedure is in place and a route risk assessment from Sasolburg to Durban and Mariannhill Toll Plaza to Durban Harbour Container Terminal was sighted. The Client has not yet indicated which route cyanide will be transported on, or whether the cyanide to be transported will be in a liquid or solid state. The transporter has committed to update their route risk assessments to include routes to be travelled before the first cyanide shipments are undertaken.

The Route Risk Assessment Procedure indicates that Route Risk Assessments are to be conducted prior to the commencement of any new route or journey, when road conditions change or, as a minimum, be reviewed at least once per year.

The transporter has committed to review safety and security concerns on routes, as more appropriate and accurate information becomes available.

In terms of its Community and Emergency Responder Involvement Policy, the transporter has committed to engage with communities and emergency responders, other stakeholders and applicable governmental agencies on the routes to be travelled by cyanide shipments.

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.

The operation is **X in full compliance with**
 in substantial compliance with **Transport Practice 1.2**
 not in compliance with

Basis for this Finding/Deficiencies Identified:

The transporter has a Staff Recruitment Policy & Procedure. This includes the requirement for a valid driver's licence, annual defensive driver training, emergency procedure training, firefighting training, and first aid training. In addition, all cyanide drivers will be required to undertake a Psychomotor Test, to test the candidate's reaction time, multitasking capacity and coordinating abilities.

The Policy states that prior to the commencement of any cyanide transport, all cyanide drivers will undergo specific cyanide awareness training and thereafter, regular cyanide

refresher training. This training will include cyanide first responder actions, as appropriate to emergency response plan requirements for the driver.

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

The operation is **in full compliance with** **Transport Practice 1.3**
 in substantial compliance with
 not in compliance with

Basis for this Finding/Deficiencies Identified:

The Equipment Purchasing Procedure requires compliance with SANS Code - 1518 Transport of dangerous goods - Design, construction, testing, approval and maintenance of road vehicles and portable tanks. There is a specific requirement covering truck tractors and trailers, tyres, and necessary ancillary equipment.

If the transporter is required to transport liquid cyanide, the tankers will be designed and built to SANS Code 1518 - Transport of dangerous goods - Design, construction, testing, approval and maintenance of road vehicles and portable tanks and according to the ADR Book Dangerous Goods by Road, Tank Code: L10CH (which designates cyanide).

The Transporter is committed to never overload the trailer, i.e. container and cyanide boxes content will never exceed trailer maximum load capacity. Through packaging design, the cyanide-containing container is 20 tons, plus trailer weight. The customer only purchases full containers of cyanide boxes, not individual cyanide boxes so the load carried will be uniform.

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

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

Basis for this Finding/Deficiencies Identified:

The Transporter only transports sealed containers that are packed and sealed by the cyanide producer. The transporter never opens the containers or handles the cyanide boxes under normal circumstances. There can be no load shifting because containers are prepacked with 20 boxes which are secured tightly within the container by the cyanide producer before despatch.

A cyanide safety program is required in the Safety Programme for the Transport of Cyanide procedure, in compliance with the National Road Traffic Act, Chapter VIII. The cyanide container is placarded by the cyanide producer in terms of IMDG requirements.

The Safety Program includes a vehicle pre-trip inspection, and journey inspections. There is a Preventative Maintenance Program in place, in terms of OEM specifications and SANS Code 10231 - Transport of dangerous goods - Operational requirements for road vehicles, Annexure F.

The transporter's Driving Hours Policy specifies no driving between 23h00 to 05h00 or further than 200 kms. A rest period of no less than 15 minutes must be taken every 3 hours. Permission is required to drive outside of these hours. Drivers must take a minimum of 9 hours rest in any 24 hour period. When undertaking cross border driving, no driving may be undertaken between 18h00 and 06h00.

MBH Bulk Haulers  Signature of Lead Auditor 3rd November 2018

The transporter's Off-Site Emergency Procedure, includes change to transportation plans or routes to consider modification or suspension of transportation, if conditions such as severe weather or civil unrest are encountered.

The Transporter's Drugs and Alcohol Policy has a zero tolerance to alcohol and drugs.

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

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

Basis for this Finding/Deficiencies Identified:

Cyanide is packaged and shipped by the producer who complies with IMDG requirements for sea transport. The Transporter only covers the final land leg of the cyanide transport chain and does not transport by air.

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

The operation is **in full compliance with** **Transport Practice 1.6**
 in substantial compliance with
 not in compliance with

Basis for this Finding/Deficiencies Identified:

The transporter's Tracking Cyanide Shipments to Prevent Losses during Transport Policy requires the use of a GSM (Global System for Mobile communications) tracking system for both truck tractor and trailer and the driver is also provided with a cell phone. The GSM tracking system is to be monitored to enable the tracking of the vehicle at any time during the journey. GSM based Panic buttons are installed in the cab of each truck tractor and are tested at the commencement of each journey and test records are kept. The Policy states that communication blackout areas will be identified during route risk assessments and appropriate procedures put in place when the areas are identified.

The Policy includes a requirement to keep inventory controls and chain of custody documentation to prevent loss of cyanide during shipment. The policy further states that MSD (Material Safety Data) sheets will be carried in the truck tractor in the orange coloured, designated space document container. Shipping records are included in the chain of custody documentation.

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.

The operation is **in full compliance with** **Transport Practice 2.1**
 in substantial compliance with
 not in compliance with

Basis for this Finding/Deficiencies Identified:

Not Applicable. No Interim Storage is envisaged at the present time.

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.

The operation is **in full compliance with** **Transport Practice 3.1**
 in substantial compliance with
 not in compliance with

Basis for this Finding/Deficiencies Identified:

The transporter has Emergency Response Plans for potential Cyanide Releases. The plans are currently generic, but will be amended to cover route risk assessments for cyanide shipment routes, once these are finalised, and will be further amended for any future changes, e.g. additional transport of liquid sodium cyanide. No interim storage is envisaged at present. The transporter's client has not yet indicated which route cyanide will be transported on, nor whether the cyanide to be transported will be in a liquid or solid state. The method of transport is road. Route risk assessments provide risk information for mitigation and emergency response scenarios. These will be amended, if necessary, depending upon first cyanide shipments.

The Equipment Purchasing Procedure requires compliance with SANS Code 1518 - Transport of Dangerous Goods - Design, construction, testing, approval and maintenance of road vehicles and portable tanks. There is a specific requirement covering truck tractors and trailers, tyres, and necessary ancillary equipment. If the transporter is required to transport liquid cyanide, the tankers will be designed to the SANS Codes. 1518 and to the ADR Book - Dangerous Goods by Road, Tank Code: L10CH (which designates cyanide).

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

The operation is **in full compliance with** **Transport Practice 3.2**
 in substantial compliance with
 not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The requirement for identification of personnel and equipment and emergency response training is included in the Transporter's Policy - Designate Response Personnel and Resources for Emergency Response. This includes duties and responsibilities, relevant inventories, inspection requirements, and initial and refresher emergency response training.

The Spills clean-up sub-contractor has been defined but still has to be trained and relevant roles defined. The transporter will ensure that the cyanide spills clean-up contractor will have clearly defined roles and responsibilities with regard to cyanide emergencies, comply with Cyanide Code requirements and demonstrate cyanide training competencies. This will be done before the first cyanide shipment.

MBH Bulk Haulers


Signature of Lead Auditor

3rd November 2018

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

The operation is **in full compliance with** **Transport Practice 3.3**
 in substantial compliance with
 not in compliance with

Basis for this Finding/Deficiencies Identified:

The Internal and External Emergency Notification and Reporting Policy covers notifying the shipper, the receiver/consignee, regulatory agencies, outside response providers, medical facilities and potentially affected communities of an emergency. This will be updated once clarity is obtained from the client on the first cyanide shipment. The Policy also includes the Requirement for Reporting using Dangerous Goods Incident Report Form – DOT (Department of Transport) SANS 10231 - Annexure D, and the NEMA (National Environmental Management Act) Emergency Incident Report form.

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

The operation is **in full compliance with** **Transport Practice 3.4**
 in substantial compliance with
 not in compliance with

Basis for this Finding/Deficiencies Identified:

Activities for remediation, such as recovery or neutralization of solutions or solids, decontamination of soils or other contaminated media and management and/or disposal of spill clean-up debris are included in the transporter's Procedure for Remediation of Cyanide Releases, Rev 00, and the Spill Clean-up and disposal Procedure. These will be finalised and amended, as appropriate, once The Spills Clean-up Sub-contractor contract has been defined and appropriate training and relevant roles finalised. The transporter will ensure that the cyanide spills clean-up contractor will have clearly defined roles and responsibilities with regard to cyanide clean-ups, comply with Cyanide Code requirements and demonstrate cyanide training competencies. This will be done before the first cyanide shipment.

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

The operation is **in full compliance with** **Transport Practice 3.5**
 in substantial compliance with
 not in compliance with

Basis for this Finding/Deficiencies Identified:

Review, evaluation and mock drills will be included in the Policy - Evaluation of Response Procedures and Capabilities, before the first cyanide shipment.

MBH Bulk Haulers  Signature of Lead Auditor 3rd November 2018