Satellite Trans – Tema. Ghana. Cyanide Transport Verification Audit.

Summary Audit Report.

2023

Report submitted to:-1400 I Street, NW, Suite 550 Washington. DC 20005 Unites Sates of America. Report of:-Satellite Trans – Ghana Head Office (Tema) Satellite Trans – Ghana

Plot No. 30F

Agro Industry Aflao Road Community 25 – Tema Ghana

Prlvate Mail Bag Comm. 1

Tema. Ghana



Satellite Trans – Tema Ghana Name of facility

Signature of Lead Auditor

Operation General Information.

Name of Transport Operation : Satellite Trans – Ghana

Name of Facility Owner : Mr. Samuel Apreku

Name of Facility Operator. : Mr. Sameul Apreku

Name of Responsible Manager : Mr. Sameul Apreku

Address : Satellite Trans – Ghana

Head Office (Tema)

: Plot No. 30F

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Operation Location Detail and Description.

Satellite Trans Ltd is a privately owned Ghanaian based company established in May 2002 with their head office base in Tema, Ghana. They specialize in providing transport and logistics services to industries in Ghana and the West African sub-region. The Company started as a six-truck, general cargo transporter with emphasis on mining products. Today Satellite Trans has grown into a full-service logistics company with own trucks, warehouses and office structures.

Team Satellite has 21 years of experience in all aspects of the logistics industry and aspires to be among the best logistics players in the West African Sub-region.

Satellite Trans assists in the management of the supply chain of several mining companies operating in Burkina Faso, Liberia, Ivory Coast, Niger Guinea, Sierra Leone and Mali. Currently the Transporter operates a fleet of 50 Heavy-Duty trucks (truck tractors and four axle trailers) and is expecting 10 new trucks.

Satellite Trans transports Sodium cyanide in packed form the Port of Tema to mine sites in Ghana and Burkina Faso.

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The vision of the Company is to be a key partner in integrated logistics in Ghana and the West-African sub region, offering higher quality of service.

With a mission to be the preferred transportation and logistics provider for our chosen market area. We are committed to delivering the highest standards of safety and we actively contribute towards reducing adverse effects on the natural environment. Provide the necessary financial substance to sustain the company and its employees, and to meet our clients' requirements through high quality service, cost control and the development of our human capital.

A state-of-the-art Global Positioning Tracking Systems fitted in our fleet and using Scania fleet management systems.

With over twenty-five (15) years in business, SATELLITE has become a leading transporter in Ghana and could compete with other transporters in the African sub-region. The company has strategically focused on providing services to mining companies which include Goldfields Ghana Ltd (Tarkwa and Damang Mines), Golden Star (Bogoso/Prestea) Ltd, Golden Star (Wassa) Ltd, Chirano Gold Mines, Newmont Gold Ghana Ltd and Perseus Gold Mining Company all in Ghana as well as Essakane Mining and Burkina Mining Corporation (BMC) or Youga Mines – in Burkina Faso, etc. SATELLITE, however transports solid sodium cyanide in 20 ft. sea containers to Tarkwa and Damang Goldfields both in Ghana and also Essakane mines and Waghnion mines in Burkina Faso

Satellite Trans has established systems to transport cyanide that is imported to Ghana through the Port of Tema. Sodium cyanide is imported in to Ghana in solid form as a >95% pure white briquette. The cyanide briquettes are packaged in Intermediate Bulk Containers (IBCs) of between 1000 to 1200 kg capacity. The briquettes are stored within a woven polypropylene bag, sealed with a polyethylene plastic liner, within a wooden crate. Consignments of stock are transported in standard shipping containers (sea containers) of up to a maximum of 24.2 tons.

Satellite Trans currently transports dangerous goods and general cargo within Ghana and between Ghana and Burkina Faso.

Within the scope of this audit, there are no trans-shipping depots or interim storage sites, as defined in the audit protocol.

Satellite Trans appreciates assistance from the external responders such as the Emergency Response teams from the mines, the local Police, the local Fire Service, the local Ambulance Service, the local community and other relevant authorities.

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This operation is	In full compliance with							
	In substantial compliance with							
	Not in compliance with							
with the International C	Cyanide Management Code.							
Compliance State	ement.							
This operation has no previous three-year a		r significant cyanide incidents during the						
Auditor Information	on.							
Audit Company:	Tommie Müller - South Africa.	Tommie Müller - South Africa.						
Lead Auditor:	Tommie Müller	Tommie Müller						
Lead Auditor E-mail:	tommieb.muller@gmail.com							
Transportation Techr	nical Expert Auditor: Tommie Müller.							
Names and signatures	of other Auditors: None.							
Auditor 1:	Name (Print / Type	Signature						
Auditor 2:	Name (Print / Type	Signature						
Auditor 3:	Name (Print / Type	Signature						
Dates of Audit:	This audit was conducted in the period	d of 10 th to 12 th April 2023.						

Auditor's Finding.

Auditor Attestation.

I attest that I meet the criteria for knowledge, experience and conflict of interest for a Cyanide Code Certification Audit Lead Auditor, established by the International Cyanide Management Institute and that all members of the audit team meet the applicable criteria established by the International Cyanide Management Institute for Cyanide Code Auditors.

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

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7th July 2023. Date

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Principles and Standards of Practice.

Principle 1. TRANSPORT

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

Standard of Practice 1.1

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

X in full compliance with

The operation is □ in substantial compliance with □ not in compliance with

Standard of Practice 1.1

Summarize the basis for this Finding/Deficiencies Identified:

Satellite Trans Limited - Ghana has developed and implemented a procedure for the selection of primary transport routes to identify and minimize the potential for accidents and releases. This procedure prompted the Health and Safety Manager and Safety Officer to undertake the survey to consider several various potential hazard types. The following detail was used as a minimum guideline in the final decision of the route. Distance from port to consignee's premises; towns and villages; types of road surface – tarred (sealed) or gravel (unsealed); areas where pedestrian movement is common; community facilities such as schools, hospitals, market areas; environmentally sensitive areas such as bridges, river crossings, proximity of rivers, water ways, drainages. proximity from water bodies; road conditions e.g. sharp bends, steep inclines and declines, narrow road sections, pitch and grade of road, roads suitable for vehicles weights; weigh bridges on routes, blind spots on road, road intersections. Road conditions – potholes; wet or foggy conditions; areas where domestic animals are prevalent; availability of medical facilities (hospitals) and police stations. Communication possibilities along the route, including availability of two cell phone services, cell phone network coverage along the route and detailing of black out areas.

In conducting the route risk assessment, the following process will be followed:

- a) Identifying the hazards (route assessment or survey)
- b) Analysing the risks
- c) Evaluating the risks
- d) Identifying all control measures
- e) Implementing the control measures
- f) Re-evaluating the risks
- g) Monitoring and review of risks.

The Transport and the Safety Officer in consultation with Ghana / Burkina Faso EPA, Ghana / Burkina Faso Highway Authorities and Samsung Services, are responsible for the conducting of route risk assessments and record the hazards and risks noted on routes. Route Risk Assessment procedure and assessments were found to be in place, current, appropriate and approved. Four Route Risk Assessments (RRA) were conducted on primary routes (main roads) and observations documented, starting from the Port of Tema to Tarkwa Mine (Ghana) 330 Km, Damang mine (Ghana) 295 Km, Essakane mine (Burkina Faso) 1351 km and Waghnion mine (Burkina Faso) 1233Km. Copies of the RRAs available. Actions to mitigate or eradicate the documented risks noted on the RRAs document. Recommended preventative actions to mitigate or eradicate the risks on selected routes are included in Route Risk Assessments (RRA) document. Discussions were held with the Ghana Environmental Protection Agency (EPA), Samsung Services and the Ghana Highway Authority in order to obtain their opinion regarding which route would be the preferred option.

Transporter applied for permit to transport cyanide within the Ghanaian borders and Burkina Faso. A license was issued by the Ghana EPA. License found to be valid. License stipulated "permit to transport hazardous chemicals by road". Renewed license expires 13th July 2024. The Company has a process (de-briefing session) whereby Escort Leader and drivers to provide feedback on route conditions noted during the journey and after each convoy delivery.

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Sodium cyanide in sea freight containers will only transport along approved routes as authorised by the receiving mine sites and local authorities.

Company procedure number SOP 4.12.16 requires that route survey to be revised annually or when there is a significant change on a transport route. The risk assessment thereafter updated.

Transporter developed a Transport Management Plan and an Emergency Response Plan for the transportation of cyanide. The regional Commander of the Ghana Police Service in Takoradi, Divisional Commander, Ghana Police Service Tarkwa, Tarkwa Government hospital, Ghana Environmental Protection Agency (EPA) who is also responsible to inform the communities, the Assembly member (elected local community representative), Ambulance Service were notified in writing. Copies of product SDS sent along.

Escorting duties performed by Company's own employees from port to mine site within the borders of Ghana. The roles and responsibilities of external entities within the borders of Burkina Faso, the military and mines are responsible for any incidents.

Maximum of eight (8) trucks loaded with two 6-meter containers each, allowed per convoy with two escort vehicles. Procedure in place stating that, should a convoy of eight trucks cause a traffic congestion, convoy will be split into two convoys of four (4() vehicles and move as two different convoys each vehicle leaded with two (2) containers per trailer. A convoy of four trucks are escorted by one escort vehicle. Convoy consists of an escort driver, escort leader and 4 truck drivers, four (4) co-drivers and an armed policeman.

Travelling speed as per Transport Management Plan, the maximum travelling speed per convoy is 70km/hr on tarred surface roads and 30km/h on untarred or gravel roads. Dusty road conditions, following distance between the trucks are expected to be 50 meters. Through towns or villages, the following distance between the trucks are expected to be 25 meters and speed reduced. On tar roads the following distance between the trucks are expected maximum 100 meters. Speed to be adjusted to weather and road conditions.

Transporter do not make use of sub-contractors for the handling or transport of sodium cyanide.

Standard of Practice 1.2

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

The operation is

X in full compliance with

□ in substantial compliance with

□ not in compliance with

Standard of Practice 1.2

Summarize the basis for this Finding/Deficiencies Identified:

The transporter only uses trained, qualified and licensed drivers to operate their vehicles. The Transport Company (Human Resources) has a recruitment policy and procedures that specifies the process of selecting a driver for employment for handling transport equipment to perform their jobs with minimum risk to themselves, the communities, and the environment.

The transporter has an employment selection process that includes the following requirements for employment as drivers and other positions in the company.

The recruitment process includes the following:

- Job analysis
- * Recruitment authorisation.
- Position advertised. Internally then externally
- Interview panel. (>one person)
- Application forms received.
- Shortlisting
- Conduct interviews

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- Selection of preferred candidate.
- Medical assessment
- Letter of offer.
- Present induction training.

Pre-employment procedure refers to: -

- Valid driver license "F"
- ❖ 35 Years and older
- Clear police record
- Five of more years' experience
- Medically fit
- Fluent in English
- Letter from previous employer

Selection process further includes road test, written examination, previous employer reference checks, driving records, qualifications, sober habits, driver's health (mental and physical), eyesight, no hearing disability, bad lung function, fitness to drive. valid driver's license class "F is required. Driver's license is renewed every 6 years and the card replaced every 2 years.

Employee's training matrix captured the following training requirements for drivers to be trained in before allowed going on the road: -

- Company induction training.
- Cyanide awareness
- Loading and off-loading of cyanide freight containers on and from trailers,
- Company's Transport Management Plan (TMP) ,
- Outcome of the route risk assessment (RRA),
- Convoy management process,
- Defensive driving techniques,
- Company emergency response plan (ERP),
- Mock drills,
- Incident / accident management,
- Basic first aid,
- Basic firefighting,
- Driver fitness,
- Drivers' competence and attitudes.
- Driver's knowledge of the local rules and of the road or highway codes.

To establish employee's knowledge after having attended training session, employee subjected to a written competency test.

Training in cyanide awareness, basic firefighting, defensive driving, emergency response plan, emergency drill is done at 12 months intervals except first aid every 3 years and firefighting every 2 years.

Both practical training and theoretical training are organized for all drivers and escort team. A minimum of 18 years of age before any employment will be offered. Grade 12 school qualification and a minimum driver experience between 5 to 10 years.

Learner escort leader and drivers goes through a selection process which includes both practical training and theoretical training for drivers and escort leaders. The selection process includes road test, written examination, previous employer reference checks, driving records, qualifications, sober habits, driver's health (mental and physical), eyesight, fitness to drive, valid driver's license class "F is required.

Transport Officer and the Safety Officer to ensure that the driver's licenses are within valid dates. Driver's licenses are checked to ensure that they are within valid dates before departure on route.

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Training matrix for drivers reflects these training requirements. Drivers attend toolbox meeting prior to each departure. Driver driving in convoy will be under supervision of convoy leader. Learner convoy leader drives along with competent convoy leader.

Training matrix reveals the following retraining requirements for drivers and escort coordinators; -

- Cyanide awareness (including loading and off-loading of cyanide) (Annually)
- Company's TMP, and Route Risk Assessment Annually
- Convoy management Annually
- Defensive driving techniques Annually
- Emergency Response Plan Annually
- ♦ Mock drills Annually.
- Incident / accident management Annually
- Basic first aid. (Every 3 years)
- Firefighting. (Every 2 years)
- Drivers' competence and attitudes Annually
- Training on driver's rules of the road or highway codes- Annually

Training matrix was found to be updated. After completion of training, a driver is allowed to embark on a journey. A new driver drives with an old driver for his first trip to acquaint himself with the road condition.

The company have not engaged in any sub-contractor for the transportation of cyanide.

Standard of Practice 1.3

Ensure that transport equipment is suitable for the cyanide shipment.

	X in full compliance with			
The operation is	☐ in substantial compliance with	Standard of Practice 1.3		
	□ not in compliance with			

Summarize the basis for this Finding/Deficiencies Identified:

Satellite Trans uses only equipment designed, maintained and is suitable for the transportation of cyanide.

Satellite Trans have a policy only to use transport equipment that is designed and maintained to operate within the cyanide loads it will be handling. Both prime movers and trailers are designed as per specification and is appropriate for the transportation of loaded sea freight containers by road. Technical specifications including truck tractor power, axle loadings and other parameters as set by the manufacturers specifications to ensure that the loads are within the legal capacities of public roads in Ghana and Burkina Faso. Transport equipment consists of diesel operated double driving axle SCANIA G467, 360 horse power (HP) truck tractors (prime mover) with a configuration of a double tyre 4 axles trailers (flatbed trailers) with eight (8) twist locks onto which two (2) 6-meter sea freight containers can be loaded.

Brand new size tyre used is 315/80R 22.5. Minimum tread depth is 4mm. Spare wheel is the same.

Both prime movers and trailers are designed as per specification and is appropriate for the transportation of loaded sea freight containers by road. Technical specifications including truck tractor power, axle loadings and other parameters as set by the manufacturers specifications to ensure that the loads are within the legal capacities of public roads in Ghana and Burkina Faso. The total weight of the tractor unit, trailers and two containers load of cyanide is 68.2 ton. As per the Ghana Highway Authority Axle Load Regulations a single axle truck (7 axles) is expected to take a maximum load of 73.5 ton. This is within the requirements of the Economic Community of West Africa state (ECOWAS) of 10.5 tons per axle. The mass that the truck tractor can pull is within the capacities of the trailer. A loaded vehicle with 20ft container of cyanide is within the allowable legal weights. Axle mass for Burkina Faso is 11.5 ton. Loaded combination within limits.

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Maintenance procedure No. G4.1.6 rev 4 dated June 2022 at Transporter and a service contract with Scania. Company has its own mechanical workshop but no repairs on Scania truck tractor or trailers are done at this workshop. All done by Scania of their dealerships as the service contract covers the servicing of the trailers as well. Servicing on vehicles is done every 20 000 km with 1 000-kilometer variance. Truck tractor and trailer serviced as a combination.

The servicing of the twist locks on the trailers are included on the service schedule for the vehicles. Each flat deck trailer is equipped with eight twist locks of which all are utilized for 2 x 6 meter container load of cyanide. Auditor conducted physical checks on the trailers and noted that the twist locks show signs of having been serviced.

Adequate dry chemical powder fire extinguishers are fitted to truck tractor and trailer. Fire extinguishers found to have been serviced in accordance with the National requirements of at least once every 6 months by an external service provider. Fire extinguishers found to be serviceable.

The operation has an approved, fully equipped mechanical workshop and qualified mechanics. Faults noted during pre-departure inspections are rectified immediately. Proper records of servicing done on vehicles are kept and were sighted during the audit. Mechanic travels along with convoy to attend to small defects found en route. On return to base, vehicles are checked again and any defects noted, rectified immediately.

Only new tyres are used on vehicles dedicated for the transportation of cyanide. Tyres are all the same size and tread depth still more than 3mm. Minimum of 3 mm tread depth is allowed. Transporter do not use recapped tyres fitted on vehicles carrying cyanide. No tyre maintenance procedure available as that is been done by external service provider. Service provider does a daily check on tyres and finding recorded. Tyre inspection reports were noted during audit.

Bill of Lading issued by Port Authorities, indicates net weight of container The gross mass per container displayed on shipping documents. Each vehicle loaded with 2 x 6-meter containers goes over a weighbridge, situated inside port terrain. The gross mass per loaded vehicle then compared with the mass been printed on the weighbridge ticket. If no discrepancy found and mass is within the allowable weight limit for that country, only then will the vehicle be allowed to depart and go onto the road. On the way from Port to consignees, there are several weigh bridges where the officials can request convoy to be weighed. If found that the maximum allowable mass been exceeded, penalties issued.

No sub-contractor been utilised for the transportation of cyanide.

Standard of Practice 1.4

Develop and implement a safety program for transport cyanide.

 X in full compliance with

 The operation is
 □ in substantial compliance with

 □ not in compliance with

Standard of Practice 1.4

Summarize the basis for this Finding/Deficiencies Identified:

Satellite Trans has a procedure to ensure that packaged Sodium Cyanide stacked in freight containers, is transported in a manner that maintains the integrity of the producer's packaging. Container collection forms part of the TM Plan No. G4.1.4 rev 2 dated 2/6/2022. Clause 2.2 "Container Security and design". A container handover procedure is in use that requires the findings of the physical inspection conducted on the integrity of the packaging (container) to be documented. TM Plan clause 3.5 deals with the procedure for receiving at port and clause 3.5.4 refers to loaded consignments. Container handover procedure (SOP 4.12.17) covered in ER Plan "Loading of Sodium Cyanide Containers". Safety officer checks that containers are in good condition e.g., no structural damages, no deformities, no holes, no obvious product leakages, rusts, that all containers are safe to use, and that the metal seals are still intact on the doors.

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Packaging complies with International Maritime Dangerous Goods Code for Group 1 hazardous goods, and has been subjected to the relevant tests. This specific design of wooden IBC been approved by the Consignor as well as the Department of Mineral and Petroleum Resources approved the packaging.

The containers, once loaded onto the trailer is properly secured to the framework of the trailer by means of the four twist locks and container belts. The Escort Leader or Safety Officer ensures that the load is correctly secured to the trailer before departure from the port is allowed. The inspection includes the checking of the seals on the container doors. On route during stops, escort coordinator checks the condition of the containers and whether the containers are still properly secured to the trailers by twist locks and container belts.

A clause in the "Container Handover Procedure" in use that refers to the checking of the integrity and condition of the container prior to loading at the Port, to ensure that the seals are still intact, container seal numbers and container number corresponds with that on shipping documentation.

Escort Leader will only allow departure from port once he is satisfied everything is in order. Checking of container twist locks and container belts on trailers are performed prior to departure with consignment and when convoy is on the road.

Placards (Hazard class 6 diamond, a skull & cross bone, UN number 1689, and Marine Pollutant labels) are used to identify the shipment as sodium cyanide as required by International Standards as well as the IMDG code and are conspicuously displayed on all four sides of a container. Diamond placard displaying hazard class 6 are affixed on the front of the cabs of the prime movers as well as at the rear end of the trailer.

The operations implement a safety program for pre-trip vehicle inspections and emergency equipment and inspections are conducted prior to departure of a convoy. Vehicle inspections and emergency equipment inspections are performed on a monthly and prior to departure with a convoy. Findings are recorded on appropriate checklist. Pre-trip inspections been performed on truck tractors and trailers prior to departure to collect cyanide loads. Along the route pre-trip inspections carried out on vehicles before continue en route. Vehicle inspection is also performed at client's premises after the off-loading of the containers were done.

Company has a service maintenance contract with Scania. Servicing of vehicles are done in accordance to a Fleet Management Maintenance Program number G4.1.8 dated June 2022. Servicing done vehicles are done at 20 000 km with a variance of 1 000 km before or after service kilos. Truck tractor and trailer are serviced as combination. Any faults noted during pre-departure inspection on the vehicles are rectified immediately. The Company do have a system for the raising of defect reporting until rectified. Default reporting form, works order, mechanic tasked and signing off when job is completed. Scania performs attending to defects reported. The work on the vehicle is done and details of work specified on the work order and signed off by the workshop supervisor. Detail of repairs performed then captured by workshop manager on electronic filling system. Copies of work orders were inspected and noted.

Tyre maintenance procedure done by RANA MOTORS who does daily check on tyres and finding recorded.

Fatigue management policy as included in Convoy Management Plan number G4.1.7 rev 4 dated Jube 2022. Drivers and escort leader only allowed to travel between the Only daylight driving permitted. 06:00 to 18:00. No night driving allowed. Maximum continuous driving hours is 4 hours whether driving on dirt or tarred surface, with 30 minutes break or 2 hours driving with 15 minutes rest. The maximum driving time within a 24-hour period should not to exceed 10 hours. Maximum driving time in a 7-day period shall be not more than 70 hours. Off-duty hours within 7 day rolling period is minimum 24 hours continuous breaks. Escort Leader controls the driving time. Driving time documented in journey planner and controlled by GPS tracking system at depot. Type of GPS system fitted by Scania and monitored daily by Transport officials at the depot. Allowable speed to travel is specified for tar surface roads, dirt / gravel roads and through towns or villages.

Eight twist locks provided per trailer. Four (4) twist locks per container and container belts are used to stabilised the freight container to the trailer. The TM Plan specifies that twist locks and container belts to be used to secure the freight containers to the trailer and prevent it from shifting. Procedures are in place that specifies that twist locks and container belts be checked before vehicles leave the port. Findings on twist locks

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and container belts are recorded on a checklist. En-route during compulsory stops these load securement devices are also checked. The checking of twist locks is included in the list of items that are to be checked during preventative maintenance.

Procedure is in place to suspend the operations during civil arrest, bad weather condition, road collapse, mud slides, etc. Procedure to be followed by convoy leader are spelt out in clauses 3.6.1, 3.6.2, 3.6.3 and 3.6.4 of the TMP No G4.1.4 dated 2/6/2022. If already on route, the Escort Coordinator identifies a safe parking area where the convoy can be parked and wait for mine site instructions or wait for the adverse weather condition to subsides. If no alternative route exists, the convoy will return or remain in Transporter's depot (clause 3.6.2 (4) of the TMP refers) and await instructions from the mine or till the weather to subside. All decisions are left with escort leader. Contents verified with escort leader.

If escort coordinator becomes aware of civil disorder occurring on road, the following actions-would be taken:

- > Bring the convoy to a stop and park at a safe location
- Notify the Ghana Police Service on emergency number 19118555.
- > Notify supervisors at transporter's depot.
- > Wait for disorder to subside or move back to warehouse for safety.

The transporter has and approved Drug & Alcohol policy. Unannounced alcohol tests are conducted randomly using the breathalyzer. A breathalyzer type ALCO device is used for the testing process. Each truck driver and escort team are tested before undertaking any trip. Device been calibrated on 29/10/2022 with calibration certificate number ALCO 22003 expires 29/10/2023 printed on a letter head of the firm DENNAK GAINT SOLUTIONS LTD who did the calibration.

Regular breathalyzer test conducted. Safety Officer conduct tests and has been trained to performed this task. Anyone found having consume alcohol, is suspended from work in the first instance and summarily dismissal from the company if found to have repeated the same act. Records of Alcohol test results documented, were noted. Effect of alcohol on human body discussed during toolbox talks. Drivers are subjected to annual medical checks to ensure that they are always healthy to perform their work. Biological test on traces of alcohol or illegal substances in the human body, forms part of the medical examination.

Auditor noted document "Control of Records" implemented and stipulate the retention period of commercial and other transport related documents. Procedure "Document and Data Control" No. SP 4.2.1.1 dated June 2022 available. Clauses noted by auditor. Financial documents are retained for a minimum period of 6 years. Other records, transport related included, are retained for a minimum period of 3 years. Disposal of obsolete documentation and data may only be done with the approval of the Managing Director. No proper archive available. Health Safety & Environmental Manager and is responsible to oversee the archiving and disposal of documents.

Satellite Trans do not sub-contractor any of the transportation of cyanide business.

Transport Practice 1.5

Follow international standards for transportation of cyanide by sea.

in full compliance with

The operation is in substantial compliance with Standard of Practice 1.5

not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

This Transport Practice is not applicable to this Transporter as no shipment of cyanide is done by sea by them.

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Transport Practice 1.6

Track cyanide shipments to prevent losses during transport.

X in full compliance with

The operation is in substantial compliance with not in compliance with

Standard of Practice 1.6

Summarize the basis for this Finding/Deficiencies Identified:

All vehicles have communications systems that include drivers and escort leader's own cell phones. Truck tractors are fitted with GPS tracking system and Company cell phones for the escort vehicles. The GPS tracking system is a SCANIA fitted system named Scania Fleet Management Portal. Convoy movement monitored 24/7 from the Depot by the Transport Officer, Safety Officer and Managing Director.

Cell phones are fitted with both Vodafone and MTN sin cards. Reason for this - should the one service provider is down for some or other reason, it can be switched over to the other network. Besides communicating with WhatsApp in Burkina Faso, all drivers and escort leader been issued with a Burkina Faso network called Orange, Sim card to ensure communication.

Lists of emergency contact numbers are incorporated in the Company's Transport Management Plan (TMP) Ref. No. G4.1.4 revision 4 dated 2/6/2022 and Emergency Response Plan and Evacuation procedures (ER Plan) Ref No. GEP4.11.2 revision 4 dated 2/6/2022. Both these documents reveal the contact numbers as per annexure G1 to G3.

Company's Transport Management Plan and Emergency Response Plan.

Appendix G1. Emergency Call List. The contact information of Satellite personnel and facilities to call upon in the event of an incident e.g. Satellite Logistics Ltd, Samsung Mining services (consignor), Takwa Goldfields, Damang Goldfields, Essakane mines (Burkina Faso), Waghnion mines (Burkina Faso), Ghana Police and Ghana National Fire Services.

Appendix G2: Medical support and Emergency Equipment contacts - Tema Government Hospital, Effia Nkwanta Hospital, Takoradi, Tarkwa Government Hospital, Ghana Ambulance Service, Tema Government Hospital, 37 Military Hospital, Winneba Government Hospital, Cape Coast Regional Hospital, Komfo Anokye Teaching Hospital, Bawku Presbyterian Hospital, Tamale Regional Hospital, Burkina Faso mine Hospital, Emergency Equipment/Resources, Satellite Trans – Tema.

Appendix G3: Emergency contacts of other External Responders e.g. Ghana police, Ghana Fire Services, Ambulance Services, Ghana Environmental Protection Agency, Ghana Water Resources Commission, Assemblyman/Unit Committee Chairman (Dompim Electoral Area)

The detail as per these documents were noted and found to be in order, up to date and appropriate.

Communication equipment is tested on a monthly basis to ensure its availability and proper functionality. All vehicles used for the transportation of cyanide have been fitted with a Scania GPS system which is used to monitor the movement of a cyanide convoy from port to consignee's mine site. Movement is followed 24/7 from the offices based in Tema.

Escort leader is also contacted to find out the reason for deviating from the route. Matter then reported to the Managing Director and the consignee. Escort leader must contact the mine site every 2 hours notifying consignee re the convoy movement, progress been made as well as convoy's location. This communication is done via E-mail for which his cell phone is used. This procedure is covered in Company's TM Plan clause 3.5.4 paragraph 5. TM Plan and ER Plan appendix F "Emergency Communication Procedures" describes the procedure that is to be followed.

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Company's Transport Management Plan (TMP) No. G4.1.,4 revision 4 dated 2/6/2022 clause 3.5.4 (Loaded Consignments) paragraph 4 of stipulates that all emergency equipment is inspected or checked for functionality, availability, adequacy, neatness, are within the validity date and are up to manufacturers specification. Findings have been captured on the "escort pre-trip equipment' checklist. During interview with escort leader/ safety officer, Mr. Prince Ofosu, confirmed this procedure.

The Escort Leader checks the communication media on a monthly basis to ensure that the cell phone batteries as fully charged and devises are functions as it should. Cell phone chargers are kept inside the cabin of the tractor unit. Findings are recorded on the equipment checklist. Prior to departure of the convoy, mobile phones are inspected, tested for functionality and to be fully charged and pre-departure emergency equipment checklist completed accordingly.

Route Risk Assessments reveals that no areas along the routes from Port to Consignee within the borders of Ghana were encounter to be without any cell phone signals. communication blackout areas noted along the route. Cell phones have 100% coverage along the routes.

Sim cards for MTN cell phone network and that for Vodafone are used throughout the trip. In case one service provider drops out, the alternative network service provider can be used. This ensures constant communication. Within borders of Burkina Faso a sim card (Orange) from this country been used to establish constant communication.

The monitoring of the movement of a cyanide convoy from port to consignee's mine site using the Scania fitted GPS tracking system to track and monitor the position and progress of the cyanide shipment.

Reporting instructions been issued that escort leader to contact the mine site every 2 hours notifying consignee of the convoy movement, the progress been made as well as convoy's location.

Transporter has implemented inventory controls and or chain of custody documentation to prevent the loss of cyanide during shipment when it commences cyanide transportation activities. This is achieved using waybills which are created based on the shipping documentation for each container. Shipping documents and product SDS accompany the containers throughout delivery. The waybills are signed by the transporters clerk and at the mine site, customer's representative, upon receipt of consignment, signs delivery documentation thereby acknowledges having received the consignment in good condition and containers unopened.

Satellite Trans retains records that indicate the mass of the cyanide in transit when it commences the transportation of the product. This is achieved through the creation of a waybill which is based on the information provided in the shipping documentation. The waybills include a description of the goods including the freight containers detail and weight.

Transporter's Clearing & Forwarding Agent (SLT) performs customs clearance duties of the containers on their behalf. Port of Ghana authorities is responsible for the off-loading of the freight containers from the vessel and onto the vehicles.

Containers are then stacked in a special designated area within the port premises away from any other product or equipment.

SLT employee responsible for checking the condition of the container for various defects / damages / issues etc. Once satisfied, SLT member endorses Bill of lading, Waybill, container interchange documents. Signed package of documents, product SDS, weigh bridge tickets, packing lists and Invoice then handed to Satellite Transport.

A product material safety data sheet accompanies each shipment to the end user. The product SDS is incorporated in the Transport Emergency Response Plan and Evacuation Procedures Plan. A copy of the product SDS is made available to the Convoy Leader prior to the departure of the convoy and kept in cab of vehicle for the duration of the delivery.

Satellite Trans do not sub-contracts any of its cyanide transport operations.

Name of facility Signature of Lead Auditor

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Principle 2. INTERIM STORAGE

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

Standard of Practice 2.1

The operation is

Store cyanide in a manner that minimises the potential for accident releases.

X in full compliance with

☐ in substantial compliance with
☐ not in compliance with

Standard of Practice 2.1

Summarize the basis for this Finding/Deficiencies Identified:

Offloading of freight containers is performed under the management of the Ghana Port and Harbour Authority. Freight containers are collected within 24 hours of arrival at the port of Tema and transported directly to the mine sites.

Questions 2.101 to 2.106 are not applicable to this transporter, as no cyanide trans-shipment or interim storage of Sodium Cyanide will not be done on the Transporter's depot facility. No stowage facility available at the port of Tema.

No trans-shipping facilities or interim storage sites noted at the facility.

Principle 3. EMERGENCY RESPONSE

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

Standard of Practice 3.1

Prepare detailed emergency response plans for potential cyanide releases.

The operation is

X in full compliance with

□ in substantial compliance with

□ not in compliance with

Standard of Practice 3.1

Summarize the basis for this Finding/Deficiencies Identified:

The transporter has developed an Emergency Response Plan & Evacuation Procedures (ERP), document No. GEP 4.11.2 and a Transport Management Pan document No. G 4.1.4. Both documents have been revised with the latest date been 2/6/2022. The ERP outlines various response actions during an incident that guides responses to potential cyanide emergencies. The ERP and the Transport Management Plan (TMP) are specific to the road transportation routes used by Satellite Trans.

ER Plan requires that mock drills be held to determine if response procedures are adequate, equipment is appropriate and to evaluate whether the personnel are properly and adequately trained to be able to act in a real situation.

The ERP document addresses four (4) possible scenarios

- Rollover of cyanide container with spillage into water ways.
- Rollover of cyanide container without a spillage of product in or outside community.,
- Rollover of cyanide container with a spill on dry ground in or outside a community;
- Rollover of cyanide container with injury.

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The ER Plan summarises the actions, the roles and responsibilities of the Satellite Trans emergency responders, Ghana Fire Service, Ghanaian Police, EPA, Mine site emergency team, hospitals and ambulance crew.

The ERP also summarises the recovery of spilt product, water resource treatment, neutralization, and decontamination of contaminated area. The required PPE per scenario detailed.

Sodium Cyanide, in briquette form, is transported by road stacked in 2 x 6-meter sea freight containers per trailer from Port of Tema to two Consignee's based in Ghana and two in Burkina Faso. No product is transported by rail, ⁱ or air. Sodium Cyanide shipped by Samsung enters Ghana through the port of Tema.

Satellite Trans hauls cyanide packed in sea freight containers by road from the Port of Tema to two mines based in Ghana and two in Burkina Faso. Route Risk Assessments have been conducted to identify the hazards on the routes. Comments on guestion 1.101 supports this question.

ER Plan states the properties of cyanide as Solid Sodium Cyanide, >95% pure white briquette. Product SDS as received from Samsung the producer / consignor of sodium cyanide solid. SDS of product as per Appendix E of ERP.

The road surface is tarred and found to be in a relatively good condition with occasional potholes in the surface. Some stretches or dirt road surface is bumpy and with potholes. Geographically the area is fairly flat but occasionally uphill. First Response team can reach accident scene by road even if the road conditions are not always smooth driving and the distances between towns. The Route Risk Assessments RRA 01 to RRA 04 that were conducted in June 2022 addressed the road surface issue with recommended mitigating actions.

The ER Plan refers to the horsepower of the truck tractors. Truck tractors with 460 horsepower (HP) engines are used for double axles to pull four axel trailers. Flatbed trailers are fitted with eight (8) manually operated twist locks utilised to stabilise the container to the trailer framework. In addition to the twist locks, container straps are also fitted around the containers. Trailers with dimensions of 12.8m x 2.4 meter are utilised for the transportation of the freight containers loaded with sodium cyanide. Two (2) 6-meter freight containers are loaded with this product onto a trailer. Dimension of a 6-meter container is 6.1 x 2.3 m. Trailers are built in accordance to manufacturer's specifications. The design of a trailer is appropriate for the load of a 2 x 6meter (20ft) containers.

The Transport Emergency Response Plan details the roles and responsibilities of external emergency responders e.g. Ghana government authorities (EPA), Ghana fire department, Ghana police services, medical facilities and Satellite Trans Emergency Team in the event of an emergency.

The roles and responsibilities of external entities within the borders of Burkina Faso, the mines and the military are responsible to attend to any cyanide related incidents.

Standard of Practice 3.2

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

X in full compliance with

The operation is □ in substantial compliance with □ standard of Practice 3.2 □ not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The transporter has a well-structured training program. Satellite Track provide emergency response training to appropriate employees as specified in the ER Plan. The cyanide awareness training is provided once per year. All the transporter's cyanide drivers and Convoy Leaders have been fully trained in the response actions to take in the event of an incident and records confirmed that training had been done.

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Minimum mandatory training for escort leaders, drivers and co-drivers are;

- 1 Cyanide awareness----Organised Annually
- 2 Defensive driving training--Annually
- 3 Cyanide emergency response scenario training (MOCK DRILLS). ---Annually.
- 4 Convoy management--- Annually
- 5 Fire fighting. Every 2 years
- 6 Use of personal protective equipment- Annually
- 7 Handling cyanide and decontamination
- 8 First Aid Training- Every Three years.
- 9 Defensive Driving Training ---- Annually

The transport vehicle operators received initial and periodic refresher training in emergency response procedures. Review training reflects on updated Training matrix and records kept. Training was presented by the external consultant. Requirements for Cyanide Awareness training and mock drills to be held are covered in the ERP. Scenario drills been held annually and record of such kept.

Satellite Trans does have an inventory of required escort emergency equipment and equipment found to have been checked by escort leader prior to go enroute as well as on a monthly basis and are up to manufacturers specification. Emergency equipment checklist completed after each check has been done and kept on file. Emergency equipment were found to be available as per escort equipment checklist and equipment were within their validity period. Emergency equipment included personal protective equipment (PPE) and is checked before a cyanide convoy departs from the depot. HCN gas monitor been calibrated and oxygen cylinders checked by supplier. Cyanide antidote, Hydroxocobalamin, kept in a cool office away from direct sunlight or heat and dampness. Antidote only administered by a medical doctor.

The Transporter have not contracted other entities to conduct the transportation of cyanide.

Standard of Practice 3.3

Develop procedures for internal and external emergency notification and reporting.

X in full compliance with

The operation is □ in substantial compliance with Standard of Practice 3.3

□ not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

Transporter do have procedures and current contact information for the notification of the suppliers the regulatory agencies, consignee, consignor, external emergency responders, medical facilities and potentially affected communities and the International Cyanide Management Institute (ICMI) of an emergency. Current emergency telephone contact numbers of internal and external responders available and up to date. Telephone list is kept in the Escort Leader's vehicle. ER Plan clauses 3.2.1 "Reporting and investigation of accident" and 3.2.2 "Sodium cyanide emergency call outs" refers.

Systems are in place to ensure the internal and external emergency notification and reporting procedures and contact telephone numbers are kept current. List of current emergency contact telephone numbers available in the ERP Appendix G1 to G3 and the same as per Appendixes in TMP. Reviewing and updating of the contact numbers in the ERP and TMP as per Appendix G1 to G3 is done annually or more frequent depending on the situation. The Safety Officer of the company is tasked with this. Confirmed during interview.

Company's Emergency Response Plan and Evacuation procedures (ER Plan).

> Appendix G1: Emergency Call List Incident. Same detail as in TM Plan appendix 1.

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- Appendix G2 : Medical Support and Emergency Equipment Contacts. Same detail as in TMP appendix G2
- Appendix G3: Emergency Contacts of other External Responders. Same detail as in TMP appendix G3

Standard of Practice 3.4

The operation is

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

X in full compliance with

☐ in substantial compliance with
☐ not in compliance with
☐ standard of Practice 3.4
☐ not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The transporter has a procedure for remediation, such as recovery or neutralisation of solutions or solids, decontamination of soils or other contaminated media and management and/or disposal of spill clean-up debris.

Procedure of a sodium cyanide spill include:

- Recovery of sodium cyanide material.
- Neutralization and/or disposal of excavated soil.
- Neutralization and/or disposal or recovered solution.
- > Neutralization of soil and/or water in situ.
- Recovery and treatment of surface /ground water.

Company procedures addresses the remediation procedure for the following;

- 4.3.1.1 Suitable Neutralizing Agents.
- 4.3.1.2 Ferrous Sulphate Monohydrate.
- 4.3.1.3 Method of Application Ferrous Sulphate Monohydrate.
- 4.3.1.4 Neutralization Procedures
- 4.3.1.6 Recovery of solid Sodium Cyanide Material
- 4.3.1.7 Neutralization And / Or Disposal of Excavated Soil
- 4.3.1.8 Neutralization and / Or Removal Of Recovered Solution
- 4.3.1.8.1 Neutralization Of Removed Contaminated Liquid
- 4.3.1.8.2 Neutralization of soil and / Or Water in Situ
- 4.3.1.8.3 Neutralisation of Top Soil In-Situ
- 4.3.1.8.3 Stabilization And Removal Of Soil
- 4.3.1.8.4 Neutralization of Removed Contaminated Soil
- 4.3.1.8.5 Recovery and Treatment Of Surface And Groundwater
- 4.3.1.8.6 Neutralisation of Contaminated pond or Dam Water
- 4.3.1.8.7 Neutralisation of Major Storage water
- 4.3.1.8.8 Neutralisation of Flowing Surface Water
- 4.3.1.8.9 Neutralization of Sub-Surface Flow Water.

Escort Leader takes charge at the scene of an accident. Escort Leader and company personnel at the scene of the spillage area is responsible for the decontamination, clean-up, rehabilitation, recovery, the arrangement or the neutralization of contaminated solids and soil as well as the disposal of such recovered soil and or contaminated product. Company personnel can be assisted by the consignee as agreed.

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4.1 of ER Plan. All clean-up operations will be conducted by a trained HSE Officer and emergency response team members with a backup support from the mine site i.e. in case the incident occurred close to the mine site. This team is be responsible for the decontamination, clean-up, rehabilitation, recovery, the arrangement or the neutralization of contaminated solids and soil and the disposal of such recovered soil. The contaminated material from the incident site will be transported safely to the mine site for disposal.

Clause 4.2.2(a) stipulates that the clean-up operation must only be conducted by trained personnel wearing the appropriate personal protective equipment.

Procedure as per ER Plan and TM Plan both states that it is strictly prohibited the use of sodium hypochlorite, ferrous sulphate and hydrogen peroxide in the neutralising of cyanide that has entered into surface water.

Standard of Practice 3.5

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

X in full compliance with The operation is ☐ in substantial compliance with Standard of Practice 3.5 □ not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The Emergency Response Plan and the Transport Management Plan states that all emergency response documentation be reviewed and updated. Periodically reviewing and evaluating of the plans is based on the outcome of the yearly mock drills, when significant or critical changes have been observed or recommendations made after a transport incident investigation. Transport working documents and forms are reviewed annually or as and when required. Transporter's do have a Management of Change (MOC) process and its implementation of any changes to their plans have been noted.

Refresher training presented in cyanide awareness and procedures which is done annually was noted. Company's TM Plan refers. ER Plan requires the conducting of emergency mock drills which is found to have been done annually. Drills are evaluated to determine if response time, the procedures are adequate, equipment is appropriate and if personnel are still acquainted with the emergency requirements. Mock drill review meetings are held and shortfalls noted.

The mock drills that were held simulated transport related cyanide incidents where "Rollover of Cyanide Container with product been spilt". Mock drills held on 28th October 2020 and 24th September 2021. Last mock drill was performed on 13th December 2022, simulated a cyanide incident with a cyanide spill as well as an employee who sustained an injury. Feedback on drill exercise and photos found to be in accordance to procedures. The drill included external emergency responders (police and ambulance staff) who attended the mock drill exercise.

The training records were reviewed and discussions with Transporter's drivers and the Convoy Leaders confirmed that they have attended training sessions.

Scenario A: Rollover of Cyanide Container with spill on dry ground in or outside a community

Scenario B: Rollover of Cyanide container without spill in or outside a community

Scenario C: Spillage into waterways.

Scenario D: Rollover of cyanide container with injury and spillage of product.

The purpose of the Mock Drills is to help the HSE Officers the Emergency Response teams, the Convoy Leaders, Escort Teams, Drivers, and other relevant external emergency responders to: -

- Recognize cyanide likely emergencies;
- Acknowledge the processes and procedures for emergency notification and incident reporting;

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7th July 2023

Date

- Know the types of cyanide incidents and the managing of such incident and the use of neutralizing agents;
- > Outline and categorize the roles and responsibilities of the transporter's personnel in emergency cases as well as external emergency responders.
- > To ensure that responders are better prepared if actual exposures and releases occur.

Lessons learned from the mock drills are used as the basis to make changes in Company's ER Plan. On mock drills held, review meetings held and short falls minuted. Where necessary, changes were made to procedures, systems and practices. Changes were made and implemented where required. The inability of the correct wearing of full-face mask with applicable cannister was identified as a non-conformance during the last mock drill. The procedure in the wearing of full-face masks was presented and mock drill repeated.

This operation has not experienced any non-compliance issues or significant cyanide incidents during the previous three-year audit cycle.

End of report.			
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