

***INTERNATIONAL CYANIDE
MANAGEMENT INSTITUTE***

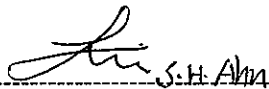
***Cyanide Transportation
Summary Audit Report***

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

SAM IK LOGISTICS Co., Ltd.

13 December 2010

SAM IK LOGISTICS Co., Ltd.


S.H. Ahn

Name of Transporter

Lead Auditor Signature
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SAM IK LOGISTICS Co., Ltd.

Name of Supply Chain Owner: SAM IK LOGISTICS Co., Ltd.

Name of Supply Chain Operator: SAM IK LOGISTICS Co., Ltd.

Name of Responsible Manager: BYUNG-YA LIM/ President

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Website: www.samik21.com

Location detail and description of operation:

SAM IK LOGISTICS Co., Ltd., transportation service provider contracted with TongSuh Petrochemical Co., Ltd., a manufacturer of sodium cyanide for roadway and railroad transportation of sodium cyanide from cyanide manufacturing Ulsan plant to Pusan port in Korea.

The sodium cyanide was produced by/in TongSuh Petrochemical Co., Ltd. Ulsan Plant, and the sodium cyanide was transported to Pusan Port in Korea by SAM IK LOGISTICS Co., Ltd..

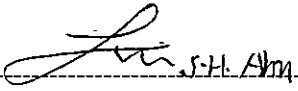
The distance from TongSuh Petrochemical Co., Ltd. to Pusan Port is about 60 Km. TongSuh Petrochemical Co., Ltd made contract with SAM IK LOGISTICS for the transportation of sodium cyanide from Ulsan Plant to Pusan Port and Ulsan Port.

The followings shows brief transportation routes

- Main transportation route
 - TongSuh Petrochemical Co., Ltd. Ulsan Plant -> SAM IK LOGISTICS Ulsan Center :
By roadway transportation
 - SAM IK LOGISTICS Ulsan Center -> Pusan Station : By rail transportation
 - Pusan Station -> Pusan Port : By roadway transportation
- Alternative transportation route
 - TongSuh Petrochemical Co., Ltd. Ulsan Plant -> Pusan Port : By roadway transportation

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Auditor's Findings

This operation is

X in full compliance

- in substantial compliance *(see below) with the International Cyanide Management Code.
- not in compliance

* 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 : DS' GMP

Audit Team Leader : Mr. Sang-Ho, Ahn
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E-mail : dosiky@naver.com

Date(s) of Audit : 14, 27, 28 August, 2010

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

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

Signed

Samsung C & T Corporation

Name of Transporter



Lead Auditor Signature

Date 13 Dec. 2010

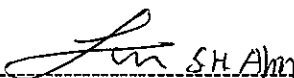


Auditor Signature

Date: 13 Dec. 2010

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Description of Consignor's role in ensuring compliance of its carriers

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** **with Transport Practice 1.1**
 in substantial compliance
 not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

SAM IK LOGISTICS Co., Ltd. prepared the Cyanide Transportation Operational Manual SCTM-01 that defined the processes of route selection for sodium cyanide transportation. According to the manual, they surveyed the possible routes from the sodium cyanide manufacture to their final destination, and then selected the sodium cyanide transportation routes considering the possibility of potential accident and release including detail check items as population density, infrastructure, pitch, grade, prevalence & proximity of water and fog. The minimization of possibility for potential accidents and release was key item in selection of sodium cyanide transportation route. The sodium cyanide was produced by/in TongSuh Petrochemical Co., Ltd. Ulsan Plant. And the sodium cyanide was transported to Pusan Port in Korea by SAM IK LOGISTICS Co., Ltd.

SAM IK LOGISTICS Co., Ltd. appropriately established risk identification and evaluation procedure in Cyanide Transportation Operational Manual SCTM-01 that covered risk identification and risk evaluation, and during May and June, 2010, they implemented the risk identification and evaluation for their main transportation route and alternative transportation route.

SAM IK LOGISTICS Co., Ltd. prepared control measure and applied to those high risk items such as release to road, land and surface water by truck capsize during road transportation and leakage to land during handling by fork lifter in SAM IK LOGISTICS Co., Ltd's Ulsan Center and Pusan Station

SAM IK LOGISTICS Co., Ltd. should re-evaluated the two transportation routes every year periodically. The periodic re-evaluation should be implemented during May every year. And for some changes related to route, road, rail, vehicle and legal requirement etc., they should re-evaluate non-periodically. As they evaluated two routes during May & June this year, they will re-evaluate during May next year. And also they defined the process for getting feedback on route condition from driver, reviewing the information and identification of additional risks. And also they should prepare additional control measure if any additional risk identified. Until now, there is no information from driver that can influence the identified risks and control measures.

SAM IK LOGISTICS Co., Ltd. appropriately documented the control measure in Cyanide Transportation Manual for safety principle and emergency preparedness related to road transportation safety principle in which driving speed, prevention of over loading and vehicle inspection etc., fork lifter handling safety principle in which operation and maintenance of fork lifter as well as emergency preparedness for release to road, land and water surface. And also the manual, principle and emergency preparedness were communicated and trained to employees, drivers and contractors like rail operation companies.

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SAM IK LOGISTICS Co., Ltd. received some comments from below stakeholders and relevant government bodies and the comments from above stakeholders and legal requirements were appropriately reviewed and reflected to route selection and development of control measures for high risk items as below;

- Comments from TongSuh Petrochemical Co., Ltd.
- Samsung C & T Corporation
- Korea health and safety agency & Fire fighting agency

SAM IK LOGISTICS Co., Ltd. reviewed the overall detail courses for the main transportation route and alternative transportation route. They finally decided that convoys, escorts or additional measures are unnecessary.

According to the Cyanide Transportation Operation Manual SCTM-01, SAM IK LOGISTICS Co., Ltd. will use escort or convey for special cases as social disturbance, strike by driver and if requested by government.

SAM IK LOGISTICS Co., Ltd. established emergency preparedness for sodium cyanide release and human exposure. In the emergency preparedness, role and mutual aid with export consigner, sodium cyanide manufacture, rail operation company, ports, safety agency, police, fire fighting agency, hospital etc. were defined. They communicated and advised the emergency preparedness to relevant bodies.

SAM IK LOGISTICS Co., Ltd. does not subcontract any of sodium cyanide roadway transportation to logistic company. The railroad transportation is implemented by Korea Rail Operation Company. SAM IK LOGISTICS Co., Ltd. checked the railroad transportation route from Ulsan Center to Pusan Station and found that Korea Rail Operation Company complied with "Railroad transportation safety act". And then SAM IK LOGISTICS Co., Ltd. made contract agreement with the Korea Rail Operation Company for sodium cyanide transportation. In the contract agreement, the responsibility of Korea Rail Operation Company to comply with railroad transportation safety act and safety manual was defined. And also procedure and emergency preparedness communicated from SAM IK LOGISTICS Co., Ltd.

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** **with Transport Practice 1.2**
 in substantial compliance
 not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

SAM IK LOGISTICS Co., Ltd. use only licensed drivers according to "Road traffic safety act". The drivers shall have license admitted the operation and driving for truck and trailer. And also they use only licensed operators of fork lifter according to "Heavy equipment control act" in Ulsan Center and Pusan Station

According to Cyanide Transportation Operational Manual SCTM-01 and "Industrial Safety and Health Act", the truck and trailer drivers and fork lifter operators receive minimum 16 hours training before undertaking the handling and transportation work for dangerous substance as chemicals, gas

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transported for each transportation order. SAM IK LOGISTICS Co., Ltd. prevented automatically the overloading for sodium cyanide transportation. The railroad transportation from Ulsan Center to Pusan Station was operated by Korea Rail Operation Company. As one of government subsidiary company, the Korea Rail Operation Company complied with "Railroad transportation safety act" in which prevention of overloading and control of train was defined.

For railroad transportation, the SAM IK LOGISTIC checked the railroad transportation route from Ulsan Center to Pusan Station and found that Korea Rail Operation Company complied with "Railroad transportation safety act" in which prevention of overloading and control of train were defined.

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

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

Summarize the basis for this Finding/Deficiencies Identified:

In the Cyanide Transportation Operational Manual SCTM-01, SAM IK LOGISTIC Co., Ltd. defined the handling and inspection method for the container of sodium cyanide. The loading of sodium cyanide to container was controlled and implemented by TongSuh Petrochemical Co., Ltd. in Ulsan Plant. After the loading to container, the amount and appearance were checked by TongSuh Petrochemical Co., Ltd. and driver. And the container was locked by driver. The amount of sodium cyanide and appearance inspection results were recorded in dispatch order sheet communicated from TongSuh Petrochemical Co., Ltd to driver. The process to maintain the integrity of producer's packaging was defined and implemented by truck and trailer drivers and fork lifter operators appropriately. Their client, TongSuh Petrochemical Co., Ltd. has used sodium cyanide containers on which the mark of toxic chemical presence were attached and easily identified during transportation. According to "Industrial safety and health act", the marking of toxic chemical presence and maintaining of MSDS were required during transportation.

SAM IK LOGISTIC Co., Ltd. has transported the sodium cyanide container marked the toxic chemical presence by TongSuh Petrochemical Co., Ltd. maintaining MSDS by drivers.

Those marking of toxic chemical presence and maintaining MSDS complied with Korea legal requirement and Cyanide Transportation Operational Manual SCTM-01

SAM IK LOGISTIC Co., Ltd. defined and implemented the safety processes related to sodium cyanide handling and transportation in Cyanide Transportation Operational Manual SCTM-01 covering the followings;

- Truck and trailer inspection prior to departure
- Preventive maintenance schedule was prepared for trucks and trailers and fork lifters.
- The maximum working time of truck and trailer driver and fork lifter operator
- Process to prevent load from shifting
- The process of suspension and modification of sodium cyanide transportation
- A drug abuse is prevented according to Cyanide Transportation Operational Manual
- The SAM IK LOGISTICS defined the retention period for records originated from inspection, preventive maintenance, transportation log sheet, dispatch order sheet etc.

For railroad transportation, SAM IK LOGISTIC Co., Ltd. checked the railroad transportation route from Ulsan Center to Pusan Station and found that Korea Rail Operation Company complied with "Railroad transportation safety act" in which safety process to prevent accident was defined.

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

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

Summarize the basis for this Finding/Deficiencies Identified:
Not applicable

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

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

Summarize the basis for this Finding/Deficiencies Identified:

The drivers have pager and mobile phone. So during transportation they can communicate with the Pusan Office, Ulsan Center and Seoul Head Office of SAM IK LOGISTIC Co., Ltd. And also they have communication channel sheet in which telephone numbers of SAM IK LOGSITICS, safety team of TongSuh Petrochemical Co., Ltd., Industrial safety and health agency, police, hospitals in Ulsan and Pusan and fire fighting agency were defined.

SAM IK LOGISTIC Co., Ltd. provided the pagers to each driver, recorded the pager number and tested once per week. The test results were recorded in log sheets. Usually the drivers communicate with Ulsan Center and Pusan Office during transportation. So actually the function of pager can be tested every transportation. Each driver has mobile phone and the number of mobile phone was registered to emergency communication channel of SAM IK LOGISTICS. The mobile phone controlled by driver individually. But, according to Cyanide Transportation Operational Manual SCTM-01 Rev.0. Chapter 1.6, the driver should control the mobile phone properly, so that can be used in emergency situation and transportation.

SAM IK LOGISTIC Co., Ltd. surveyed the main route and alternative route during route selection for sodium cyanide transportation. They could not find any communication blackout area along the transportation main route and alternative route.

SAM IK LOGISTIC Co., Ltd. defined the tracking of sodium cyanide transportation in Cyanide Transportation Operational Manual SCTM-01. For each transportation by truck and trailer, the progress of transportation can be checked by mobile communication between driver and Ulsan Center & Pusan Office. The Ulsan Center and Pusan Office have maintained the transportation log sheets in which the transportation order number, truck and trailer number, drivers name, train number, departing time and arriving time were recorded.

The inventory control was defined in Cyanide Transportation Operational Manual SCTM-01. The TongSuh Petrochemical Co., Ltd. input the dispatch amount, container number and date for individual transportation order in their ERP system. They record the same items in dispatch sheet and issued to driver of SAM IK LOGISTIC Co., Ltd. And the driver convey the sodium cyanide container from SAM IK LOGISTICS Co., Ltd.

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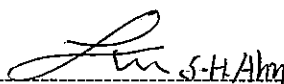
TongSuh Petrochemical Co., Ltd to Ulsan Center and submit the dispatch sheet to Ulsan Center. The Ulsan Center maintain the dispatch sheet and send the copy of dispatch sheet to Pusan Office by mail or fax. Pusan Office check the container delivered by train with the detail items in dispatch sheet. And then order the driver for the transportation from Pusan Station to Pusan Port. The driver convey the sodium cyanide container from Pusan Station to Pusan Port and submit the dispatch sheet to shipping company. During the above transportation, the inspection of lock on door and container appearance were checked and results were recorded by Ulsan Center and Pusan Office. And also the Ulsan Center and Pusan Office have maintained the transportation log sheets in which the transportation order number, truck and trailer number, drivers name, train number, departing time and arriving time were recorded.

The dispatch and transportation control were defined in Cyanide Transportation Operational Manual SCTM-01. The TongSuh Petrochemical Co., Ltd. input the dispatch amount, container number and date for individual transportation order in their ERP system. They record the same items in dispatch sheet and issued to driver of SAM IK LOGISTIC Co., Ltd. And the dispatch sheet was finally communicated to shipping company. During the audit, it was found that the amount of sodium cyanide in container and transportation order were recorded in each dispatch sheet, ERP system of TongSuh Petrochemical Co., Ltd and transportation log sheets in Ulsan Center and Pusan Office. The Material Safety Data Sheet was available during roadway transportation, railroad transportation, Ulsan Center and Pusan Office. The driver, operator and office member maintain Material Safety Data Sheet in truck, train, storage area or office.

For railroad transportation, SAM IK LOGISTIC Co., Ltd. checked the railroad transportation route from Ulsan Center to Pusan Station and found that Korea Rail Operation Company complied with "Railroad transportation safety act".

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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 **with Transport Practice 2.1**
 in substantial compliance
 not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

SAM IK LOGISTIC Co., Ltd. considered the interim storage areas as Ulsan Center and Pusan Station. In Ulsan Station, only the trans-loading works by fork lifter from truck & trailer to train was implemented. And actually there is no temporary storage for the sodium cyanide container on the ground in Ulsan Center. However they controlled the trans-loading area as below.

- Install the notice panel in which sodium cyanide presence, no smoking & eating, prohibit fire.
- Install emergency preparedness in which the use of personnel protective equipment, control of spilled sodium cyanide and communication channel defined.

They also maintained personnel protective equipment as mask, glove, rubber boot, etc. and control equipment as shovel, film bag, sand etc. In Pusan Station, the SAM IK LOGISTICS rent about 400m² from Korea Railroad Operation Company and use as dangerous substance storage area. The sodium cyanide containers transported from train was unloaded by fork lifter and maintained temporary about 1 or 2 days in the interim storage area. Then the sodium cyanide containers were loaded to truck and trailer and transported to Pusan Port.

Pusan Office team controlled the interim storage area as below;

- Install the notice panel in which sodium cyanide presence, no smoking & eating, prohibit fire.
- Install emergency preparedness in which the use of personnel protective equipment, control of spilled sodium cyanide and communication channel defined.

They also maintained personnel protective equipment as mask, glove, rubber boot, etc. and control equipment as shovel, film bag, sand etc.

The Ulsan Center area was totally fenced and prevented unauthorized access to that area. So only Ulsan Center Member, driver and member of Korea Railroad Operation Company admitted for the entrance. Visitor shall be checked, registered and admitted the entrance.

In Pusan Station, the interim storage area of sodium cyanide container was fenced and locked by Pusan Office member. Only the Pusan office member as nominated controller, manager and fork lifter operator are admitted for the entrance. The interim storage area is controller by Pusan Office member. And also the overall Pusan Station area was controlled by Korea Railroad Operation Company, so security level is relatively high.

In Ulsan Center, the trans-loading works from truck & trailer to train was implemented. So actually the sodium cyanide containers were maintained in train and partially truck & trailer. As the sodium cyanide containers were loaded in train, so separated from incompatible chemicals as acid, oxidizer and explosives. In Pusan Station, the sodium cyanide containers were maintained in nominated area as above. That area was fenced and controlled by Pusan Office member to prevent the access of foreigner and incompatible chemicals as acid, oxidizer and explosives. And the sodium cyanide stored in containers of which the bottom is not directly contact with ground. So possibility of mixing with other materials is very low.

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The sodium cyanide was initially packaged in film bag and then packaged again by woven bag or drum. The woven bag and drum were packaged again by wooden box and then inserted into container. The sodium cyanide containers were maintained in interim storage area to prevent the contact with water as below;

- 1) The sodium cyanide was maintained in container of which the bottom was not directly contact with ground.
 - 2) The sodium cyanide was maintained in container designed & made to protect rain water.
- So the sodium cyanide stored in a manner designed to minimize the potential contact with water. The possibility of water contact in Ulsan Center and Pusan Station is very low.

The sodium cyanide containers were maintained on train in Ulsan Center and nominated area in Pusan Station. Both interim storage areas of Ulsan Center and Pusan Station are opened. So, no need for ventilation of hydrogen cyanide gas.

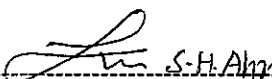
In Ulsan Center, the trans-loading works from truck & trailer to train was implemented.

The trans-loading works were implemented by fork lifter near the train. That area was segregated from water line and any other vehicle and foreigner. So any spilled sodium cyanide can not spread to other area and cause extra contamination of water and land by vehicle and foreigner.

The sodium cyanide containers were maintained in nominated storage area for which bunds were around that area. So, the spilled sodium cyanide cannot be released into water or spread to other area and cause extra contamination. The interim storage area is about 400m², so the capacity is enough to prevent the extend of release of spilled sodium cyanide. Therefore, they do not expect that the spilled sodium cyanide be able to be released outside the containers because the sodium cyanide is maintained in containers appropriately.

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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 **with Transport Practice 3.1**
 in substantial compliance
 not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

SAM IK LOGISTIC Co., Ltd. identified possible emergency situations as sodium cyanide release to road, land, surface water, robbery during transportation and interim storage and taken away by criminal suspect during transportation. And define the emergency response plan in Cyanide Transportation Operational Manual SCTM-01. They defined what they should do wearing of personnel protective equipment, using of treatment equipment for spilled sodium cyanide, communication channel and relevant external responders such as sodium cyanide manufacture "TongSuh Petrochemical Co., Ltd.", shipping companies, export consigner, Korea safety and health agency, police hospitals in Ulsan and Pusan.

SAM IK LOGISTIC Co., Ltd. identified possible emergency situations as sodium cyanide release to road, land, surface water, robbery during transportation and interim storage and taken away by criminal suspect during transportation. And define the emergency response plan in Cyanide Transportation Operational Manual SCTM-01. And also they prepared detail emergency response plans those can be applicable for such cases individually as sodium cyanide release to road, land, surface water, robbery during transportation and interim storage and taken away by criminal suspect during transportation. So the emergency response plan in Cyanide Transportation Operational Manual SCTM-01 can be applied over all emergency situation. And also the detailed emergency response plans can be applied case by case to relevant emergency situation.

SAM IK LOGISTIC Co., Ltd. transported the solid sodium cyanide. They prepared the emergency response plan appropriate to over all emergency situations possibly expected for solid sodium cyanide transportation in Cyanide Transportation Operational Manual SCTM-01. The plan considered the solid sodium cyanide packaged in film & box and transported in container. So considering the spillage of solid sodium cyanide, they define the preparation of treatment equipment, personnel protective equipment and neutralization method in emergency preparedness plan. According to the plan, they will use sawdust, cement powder and sand to collect and neutralize the spilled sodium cyanide.

SAM IK LOGISTIC Co., Ltd prepared the emergency response plan appropriate to over all emergency situations in Cyanide Transportation Operational Manual SCTM-01. They considered the two transportation methods as roadway transportation and railroad transportation. They also received comments and information from TongSuh Petrochemical Co., Ltd., Industrial safety and health agency and Korea Railroad Operation Company and reflected to the emergency response plan. They also communicated the emergency response plan to Korea Railroad Operation Company.

SAM IK LOGISTIC Co., Ltd. prepared the emergency response plan appropriate to over all emergency situations in Cyanide Transportation Operational Manual SCTM-01. And also they prepared detail emergency response plans those can be applicable for such cases individually as sodium cyanide release to road, land, surface water, robbery during transportation and interim storage

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