



November 2012

**INTERNATIONAL CYANIDE MANAGEMENT  
CODE CYANIDE TRANSPORTATION AUDIT**

**Australian Gold Reagents Limited  
Ocean Freight Supply Chain  
Certification Audit, Summary  
Audit Report**

**Submitted to:**

International Cyanide Management Institute (ICMI)  
1400 I Street, NW - Suite 550  
Washington, DC 20005  
UNITED STATES OF AMERICA

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AUSTRALIA

REPORT



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**Report Number.** 107643325-002-R-Rev2

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## 1.0 INTRODUCTION

### 1.1 Operational Information

<b>Name of Transportation Facility:</b>	AGR Ocean Freight Supply Chain
<b>Name of Facility Owner:</b>	Not Applicable
<b>Name of Facility Operator:</b>	Australian Gold Reagents Ltd
<b>Name of Responsible Manager:</b>	Ed Beard, AGR Export Technical Manager
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<b>Email:</b>	ed.beard@csbp.com.au

### 1.2 Description of Operation

#### 1.2.1 Australian Gold Reagents Ltd and CSBP Ltd

AGR is the management company of the unincorporated joint venture between CSBP and Coogee Chemicals Pty Ltd (Coogee Chemicals). CSBP, a subsidiary of Wesfarmers Ltd, is the major participant in the venture and acts as both plant operator and sales agent. Coogee Chemicals is a local manufacturer and distributor of industrial chemicals.

The AGR cyanide production facility is located within CSBP's fertiliser and chemicals complex at Kwinana, some 40 km south of Perth within the state of Western Australia. AGR produces and transports two different forms of sodium cyanide from the Kwinana production facility, namely solution and solids. Sodium cyanide solution is produced as a 30% liquid and solid sodium cyanide as a >97% white briquette.

#### 1.2.2 Marine Transportation


The AGR Ocean Freight Supply Chain from Fremantle Port, WA, to Destination Ports covers the transportation of solid sodium cyanide by ship from the Fremantle Port to various interstate and international ports. The AGR Ocean Freight Supply Chain includes:

- marine transportation of solid cyanide (intermediate bulk containers (IBCs) within shipping containers) from the Fremantle Port, WA, to various interstate and international ports by MSC and Maersk
- handling and storage of cyanide at the Port of Laem Chabang.

The AGR Ocean Freight Supply Chain does not include:

- transportation of AGR's sodium cyanide from its production facility to the Fremantle Port
- handling and storage of sodium cyanide at destination ports (other than the Port of Laem Chabang) and transportation to customer mine sites.

AGR Ocean Freight Supply Chain  
Name of Facility

  
Signature of Lead Auditor

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The AGR Ocean Freight Supply Chain from Fremantle Port, WA, to Destination Ports is illustrated in Figure 1.

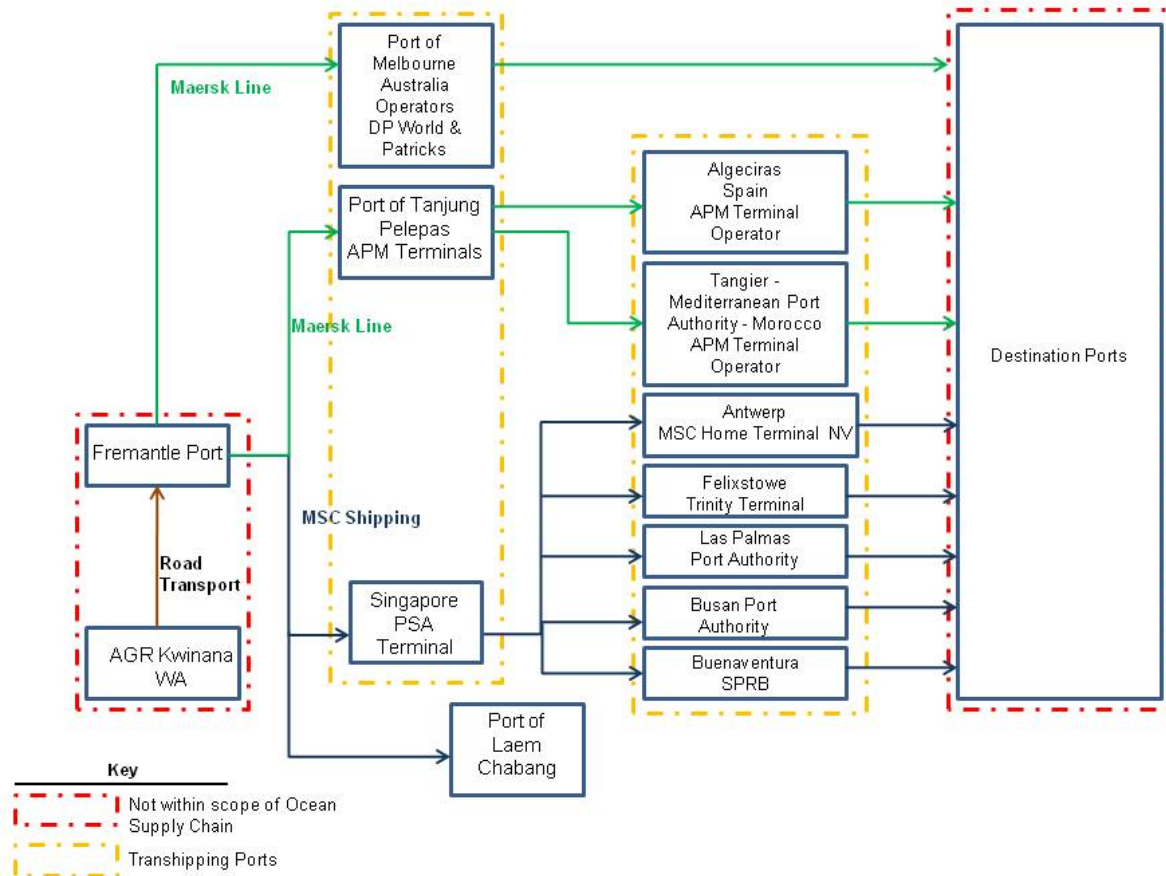


Figure 1: AGR Ocean Freight Supply Chain.


**1.2.2.1 Mediterranean Shipping Company**

MSC, headquartered in Geneva, Switzerland, is engaged in worldwide container transport. As of September 2010, MSC operates 423 container vessels with the capacity to handle the equivalent capacity of 1 776 000, 20 foot containers. MSC has set up dangerous goods cargo management centres that control the proper stowage of hazardous cargo worldwide through their Chem Link computer system headquartered in Antwerp. This hazardous cargo system is initiated when hazardous cargo is booked into the container booking MSC Link computer system.

All of MSC’s vessels are registered by the Lloyd’s Register Group, which provides classification and certification of ships, and inspects and approves important components and accessories. This registration is a requirement of the Australian Customs Act.

MSC has provided shipping services to AGR since AGR commenced the export of solid sodium cyanide in 2002. Shipping destinations include ports in Africa, Asia, North America, the Middle East and Oceania.

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### **1.2.2.2 Maersk Line**

Maersk, headquartered in Geneva, Switzerland, operates a fleet of containers vessels with worldwide shipping coverage. The fleet consists of more than 500 container vessels with the capacity to handle more than 1 900 000, 20 foot containers. Maersk operates a container booking and tracking system called the Global Customer Service System (GCSS). The system is also the management tool for handling the dangerous goods cargo for the proper control of the stowage of hazardous cargo.

All of Maersk's vessels are registered by the Lloyd's Register Group, which provides classification and certification of ships, and inspects and approves important components and accessories. This registration is a requirement of the Australian Customs Act.

Maersk has provided shipping services to AGR since AGR commenced the export of solid sodium cyanide in 2002. Shipping destinations included various interstate and international ports.

### **1.2.3 Ports**

#### **1.2.3.1 Port of Laem Chabang**

The Port of Laem Chabang is Thailand's premier deep sea port located on the Eastern Shore of the Upper Gulf of Thailand, approximately 110 km south of Bangkok. The port is under the overall management of The Port Authority of Thailand. It presently operates 11 terminals to accommodate various types of vessels including container ships, bulk carriers, pure car carriers and passenger liners.

The port currently handles approximately 3.5 million equivalent container units (TEUs) per annum, which include approximately 24 000 containers of Dangerous Goods.

AGR ships sodium cyanide to this port via MSC for end user mines in Thailand and Laos. A due diligence review of this port was undertaken on 18 October 2012 and concluded that AGR had no concerns regarding the handling of its product at Laem Chabang.


At the Port of Laem Chabang, AGR's sodium cyanide is unloaded the stevedoring company (Maersk Logistics) and temporarily stored at the Dangerous Goods Logistics Centre (the Centre) whilst the necessary customs clearances are obtained. The Centre is located within the Port area and is managed by JWD InfoLogistics Co Ltd to IMDG Code regulations, under a long term lease agreement with the port authorities. The JWD InfoLogistics have over 30 years' experience in the handling and storage of dangerous goods (DG), and have been operating at the Port for six years.

The Centre is laid out by DG Class and this allows the required segregation of products and classes. Each DG Class area is designated with signs and each container is allotted a bay within its DG Class area. The cyanide lay down area (Class 6) is segregated by distance from other DG Classes. The same segregation exists between different DG Classes.

### **1.2.4 Transit Storage**

Depending on weather, cargo types and other operational matters, shipping lines may trans-ship their cargo from one vessel to another. This involves unloading the cargo at a terminal facility, temporary set down and loading onto another vessel for the continuation of the delivery. Such transshipping does occur with AGR's sodium cyanide. AGR has no control over when and where this happens, but through its due diligence investigations has satisfied itself that the shipping lines used (Maersk and MSC) undertake the shipping of the product in accordance with the IMDG Code and in a professional manner. This extends to the selection of terminals for transshipping.

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Transshipping ports used include:

- Maersk:
  - Port of Tanjung Pelepas, Malaysia
  - Port of Tangier, Morocco
  - Algeciras Port, Spain.
- MSC:
  - Port of Singapore
  - Antwerp Port
  - Felixstowe Port, UK
  - Las Palmas Port, Canary Islands
  - Port of Busan, South Korea
  - Buenaventura Port, Colombia.

### **1.2.5 Road Transportation**

AGR does not transport by road within the scope of this Supply Chain.

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## 2.0 CONSIGNOR SUMMARY

### 2.1 Principle 1 - Transport

Transport Cyanide in a manner that minimises the potential for accidents and releases.

#### 2.1.1 Transport Practice 1.1

Select cyanide transport routes to minimise the potential for accidents and releases.

in full compliance with

The operation is

in substantial compliance with

**Transport Practice 1.1**

not in compliance with

**Summarise the basis for this finding/deficiencies identified:**

The AGR Ocean Freight Supply Chain is in FULL COMPLIANCE with Transport Practice 1.1 requiring the transport of cyanide in a manner that minimises the potential for accidents and releases.

#### **MCS and Maersk**

AGR utilises MSC and Maersk for interstate and international shipping of solid sodium cyanide. Containers are placed and secured on their vessels at the loading port by the Port stevedoring company or service provider, and removed at the Port of destination by the stevedoring company or service provider at that Port. As such, MSC and Maersk provide a marine carrier service only, and all actual handling of containers (on and off vessels) is undertaken by Stevedoring companies at each Port.

There are a number of instances where AGR's sodium cyanide is transhipped at terminals or hubs en-route to its final destination Port. AGR has no control over when and where this happens, but through its due diligence investigations has satisfied itself that the shipping lines used (Maersk and MSC) undertake the shipping of the product in accordance with the IMDG Code and in a professional manner. This extends to the selection of terminals for transhipping.

AGR does not have control of the routes taken by the shipping lines, but has undertaken due diligence reviews of both MSC and Maersk to ensure that the shipments are in accordance with the *International Maritime Dangerous Goods Code* (IMO DG Code). AGR's due diligence reviews have found that there were no issues of concern in regards to the management and shipping of sodium cyanide product by either shipping line. In addition, through their dealings with the two shipping lines, AGR has found MSC and Maersk to be professional organisations. The due diligence review states that:


*"The report is not a final acceptance of [the shipping lines] for future work and as with all service providers to AGR, AGR will continue to review and monitor the performance."*

The routes taken are not 'definitive' routes as ships can take varying routes to arrive at the same destination, taking into account tides, currents, wind and storms. This also noted in the schedules having estimated times for vessels travelling between Ports.

#### **Port of Laem Chabang**

AGR does not have control over the handling of shipping lines and their cargo at the Port of Laem Chabang. The Port Authority's Harbour Master oversees the operation of the overall Port operations, including entities contracted to perform port operations.

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AGR has undertaken a review of the port operations that the transportation, handling and storage of its sodium cyanide is to acceptable standards. The AGR due diligence report concludes that:

*“The ongoing review as a service provider and this due diligence report has found no issues of concern in regards to The Port Authority of Thailand and its lease operators...”*

**2.1.2 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.**

in full compliance with

The operation is

in substantial compliance with

**Transport Practice 1.2**

not in compliance with

**Summarise the basis for this finding/deficiencies identified:**

The AGR Ocean Freight Supply Chain is in FULL COMPLIANCE with Transport Practice 1.2 requiring personnel operating cyanide handling and transport equipment can perform their jobs with minimum risk to communities and the environment.

**MSC and Maersk**

AGR utilises MSC and Maersk for the marine transport of sodium cyanide to various destination Ports. All handling (including loading and unloading) is undertaken by other entities (e.g. stevedoring companies). These ports are not included in the scope of this audit and are assessed under due diligence as part of a separate supply chain.

All Maersk and MSC vessels are registered by the Lloyd’s Register Group, which provides classification and certification of ships, and inspects and approves important components and accessories. This registration is a requirement of the Australian Customs Act.

Due diligence reviews of MSC and Maersk were undertaken by AGR to ensure that the shipments are conducted in accordance with the IMO DG Code. AGR’s due diligence reviews have found that there were no issues of concern in regards to the management and shipping of sodium cyanide product by either shipping line. In addition, through their dealings with the two shipping lines, AGR has found MSC and Maersk to be professional organisations.


**Port of Laem Chabang**

AGR does not have control over the handling of shipping lines and their cargo at the Port of Laem Chabang. The Port Authority’s Harbour Master oversees the operation of the overall Port operations, including entities contracted to perform port operations.

AGR has undertaken a review of the port operations that the transportation, handling and storage of its sodium cyanide is to acceptable standards. The AGR due diligence report concludes that:

*“The ongoing review as a service provider and this due diligence report has found no issues of concern in regards to The Port Authority of Thailand and its lease operators...”*

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**2.1.3 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

**Summarise the basis for this finding/deficiencies identified:**

The AGR Ocean Freight Supply Chain is in FULL COMPLIANCE with Transport Practice 1.3 requiring that transport equipment is suitable for the cyanide shipment.

**MSC and Maersk**

All Maersk and MSC vessels are registered by the Lloyd's Register Group, which provides classification and certification of ships, and inspects and approves important components and accessories. This registration is a requirement of the Australian Customs Act.

AGR undertake due diligence reviews of MSC and Maersk to ensure that the shipments are in accordance with the IMO DG Code. AGR's due diligence reviews have found that there were no issues of concern in regards to the management and shipping of sodium cyanide product by either shipping line. In addition, through their dealings with the two shipping lines, AGR has found MSC and Maersk to be professional organisations.


**Port of Laem Chabang**

AGR does not have control over the handling of shipping lines and their cargo at the Port of Laem Chabang. The Port Authority's Harbour Master oversees the operation of the overall Port operations, including entities contracted to perform port operations.

AGR has undertaken a review of the port operations that the transportation, handling and storage of its sodium cyanide is to acceptable standards. The AGR due diligence report concludes that:

*"The ongoing review as a service provider and this due diligence report has found no issues of concern in regards to The Port Authority of Thailand and its lease operators..."*

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**2.1.4 Transport Practice 1.4**

**Develop and implement a safety program for transport of cyanide.**

in full compliance with

**The operation is**

in substantial compliance with

**Transport Practice 1.4**

not in compliance with

**Summarise the basis for this finding/deficiencies identified:**

The AGR Ocean Freight Supply Chain is in FULL COMPLIANCE with Transport Practice 1.4 requiring the development and implementation of a safety program for the transport of cyanide.

**MSC and Maersk**

All Maersk and MSC vessels are registered by the Lloyd’s Register Group, which provides classification and certification of ships, and inspects and approves important components and accessories. This registration is a requirement of the Australian Customs Act.

MSC and Maersk require from their clients (e.g. AGR) evidence that products booked for transport meet the packaging requirements of the IMO DG Code 2008. Both shipping liners reserve the right to refuse acceptance of cargo that does not meet packaging, container and documentation standards set out in the IMO DG Code.

Due diligence reviews of MSC and Maersk were undertaken by AGR to ensure that the shipments are conducted in accordance with the IMO DG Code. AGR’s due diligence reviews have found that there were no issues of concern in regards to the management and shipping of sodium cyanide product by either shipping line. In addition, through their dealings with the two shipping lines, AGR has found MSC and Maersk to be professional organisations.


**Port of Laem Chabang**

AGR does not have control over the handling of shipping lines and their cargo at the Port of Laem Chabang. The Port Authority’s Harbour Master oversees the operation of the overall Port operations, including entities contracted to perform port operations.

AGR has undertaken a review of the port operations that the transportation, handling and storage of its sodium cyanide is to acceptable standards. The AGR due diligence report concludes that:

*“The ongoing review as a service provider and this due diligence report has found no issues of concern in regards to The Port Authority of Thailand and its lease operators...”*

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**2.1.5 Transport Practice 1.5**

**Follow international standards for transportation of cyanide by sea and air.**

**in full compliance with**

**The operation is**

in substantial compliance with

**Transport Practice 1.5**

not in compliance with

**Summarise the basis for this finding/deficiencies identified:**

The AGR Ocean Freight Supply Chain is in FULL COMPLIANCE with Transport Practice 1.5 requiring the transport of cyanide by sea and air to follow international standards.

All shipments of AGR sodium cyanide comply with the IMO DG Code. This includes packaging, labelling of IBCs, placarding of containers, damage inspections, supply of correct documentation and appropriate stowage and separation, both at sea and during unloading and transit through the Port of Laem Chabang.

No consignments of cyanide are transported by air within the scope of this audit.

**2.1.6 Transport Practice 1.6**

**Track cyanide shipments to prevent losses during transport.**

**in full compliance with**

**The operation is**

in substantial compliance with

**Transport Practice 1.6**

not in compliance with

**Summarise the basis for this finding/deficiencies identified:**

The AGR Ocean Freight Supply Chain is in FULL COMPLIANCE with Transport Practice 1.6 requiring the tracking of cyanide shipments to prevent losses during transport.

**MSC and Maersk**

AGR communicates with Maersk and MSC onshore representatives by phone, fax and email. All vessels have continuous means of tracking and communication during their voyages.

Communication equipment is tested through continuous use.


All Maersk and MSC vessels are registered by the Lloyd's Register Group, which provides classification and certification of ships, and inspects and approves important components and accessories. This registration is a requirement of the Australian Customs Act.

All vessels have continuous means of tracking and communication during their voyages.

Both MSC and Maersk have software that tracks containers from the time they are released for use by AGR, right through the shipping process and until they are received back at their container yards.

Chain of custody documentation is used by MSC and Maersk to prevent the loss of AGR sodium cyanide during shipment. This documentation includes the MO41 Document, which accompanies each container, and the ships manifest, which identifies the location and content of each container on the vessel. In addition, both shipping lines have computer tracking software to allow them to identify at which phase of shipment each container is in.

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Name of Facility

  
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## AGR OCEAN FREIGHT SUPPLY CHAIN, SUMMARY AUDIT REPORT

The MO41 Documentation accompanying each container of sodium cyanide and the ships manifest contain information on the amount of cyanide in transit and necessary handling requirements.

AGR utilises MSC and Maersk for interstate and international shipping of solid sodium cyanide.

AGR does not have control of the routes taken by the shipping lines, but has undertaken due diligence reviews of both MSC and Maersk to ensure that the shipments are in accordance with the IMO DG Code. AGR's due diligence reviews have found that there were no issues of concern in regards to the management and shipping of sodium cyanide product by either shipping line. In addition, through their dealings with the two shipping lines, AGR has found MSC and Maersk to be professional organisations. The due diligence review states that:

*"The report is not a final acceptance of [the shipping lines] for future work and as with all service providers to AGR, AGR will continue to review and monitor the performance."*

### **Port of Laem Chabang**

AGR communicates with the Port Authority representatives by phone, fax and email.

Communication equipment is tested through continuous use.

Software programmes control container placement and movement. This software package identifies each individual container placement area in designated stacks. The input information for the placement of containers comes from the vessel's manifest. It is this programme that identifies containers with hazardous cargo and allows for all containers with hazardous cargo to be moved immediately after discharge of the vessel to the Centre

Transport from the Port Berth B1 to the Centre is controlled by strict documentary checks detailing the container details and contents therein.


The cyanide lay down area is segregated by distance from other Classes; the same segregation exists between all Classes. The cyanide bays are allocated from the warehouse computer system, which captures the container, its container number, the number of product packages in each container, the product and the UN reference number.

AGR does not have control over the handling of shipping lines and their cargo at the Port of Laem Chabang. The Port Authority's Harbour Master oversees the operation of the overall Port operations, including entities contracted to perform port operations.

AGR has undertaken a review of the port operations that the transportation, handling and storage of its sodium cyanide is to acceptable standards. The AGR due diligence report concludes that:

*"The ongoing review as a service provider and this due diligence report has found no issues of concern in regards to The Port Authority of Thailand and its lease operators..."*

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## 2.2 Principle 2 - Interim Storage

Design, construct and operate cyanide trans-shipping depots and interim storage sites to prevent release and exposures.

### 2.2.1 Transport Practice 2.1

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

in full compliance with

The operation is

in substantial compliance with

Transport Practice 2.1

not in compliance with

**Summarise the basis for this finding/deficiencies identified:**

The AGR Ocean Freight Supply Chain is in FULL COMPLIANCE with Transport Practice 2.1 requiring transporters design, construct and operate cyanide trans-shipping depots and interim storage sites to prevent release and exposures.


#### **MSC and Maersk**

Depending on weather, cargo types and other operational matters, shipping lines may tranship their cargo from one vessel to another. This involves unloading the cargo at a terminal facility, temporary set down and loading onto another vessel for the continuation of the delivery. Such transshipping does occur with AGR's sodium cyanide. AGR has no control over when and where this happens, but through its due diligence investigations has satisfied itself that the shipping lines used (Maersk and MSC) undertake the shipping of the product in accordance with the IMDG Code and in a professional manner. This extends to the selection of terminals for transshipping.

Transshipping ports used include:

- Maersk:
  - Port of Tanjung Pelepas, Malaysia
  - Port of Tangier, Morocco
  - Algeciras Port, Spain.
- MSC:
  - Port of Singapore
  - Antwerp Port
  - Felixstowe Port, UK
  - Las Palmas Port, Canary Islands
  - Port of Busan, South Korea
  - Buenaventura Port, Colombia.

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## AGR OCEAN FREIGHT SUPPLY CHAIN, SUMMARY AUDIT REPORT

### Port of Laem Chabang

The Dangerous Goods Warehouse is managed under Thailand Regulations by JWD InfoLogistics Co Ltd to IMDG Code regulations. It handles all types of containers and goods. The dangerous good yard is laid out by DG Class and this allows the required segregation of products and classes. Each Class area is designated with signs and each container or isocontainer is allotted a bay within its Class area. The cyanide lay down area Class 6 has is segregated by distance from other Classes; the same segregation exists between all Classes. The cyanide bays are allocated from the warehouse computer system which captures the container, its container number, the number of product packages in each container, the product and the UN reference number. The nature of the product also captured in the reference material.


JWD InfoLogistics Co Ltd policies dictate smoking, open flames and eating and drinking areas and required PPE.

The Dangerous Goods Warehouse is fully walled with security fencing on the wall. The entrance is covered by manned gates. Manned security cameras cover the yard area and gates. The full yard area is also fully lit.

All cyanide is stored in the open in sealed containers, which are not opened until final delivery at the destination mine sites. This provides a barrier to mixing with incompatible materials and water, as well as allowing adequate ventilation.

The warehouse yard area is fully concreted and is laid with catchment channels that will collect any spill, the channels lead to sumps. Any solid spill will be contained on the concrete pad and a liquid spill will drain to the collection channels to be collected and then handled within the sump area. JWD InfoLogistics Co Ltd's Emergency Response Plan includes steps for a chemical spills.

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## 2.3 Principle 3 - Emergency Response

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

### 2.3.1 Transport Practice 3.1

Prepare detailed Emergency Response Plans for potential cyanide releases.

in full compliance with

The operation is

in substantial compliance with

**Transport Practice 3.1**

not in compliance with

**Summarise the basis for this finding/deficiencies identified:**

The AGR Ocean Freight Supply Chain is in FULL COMPLIANCE with Transport Practice 3.1, requiring the operation to prepare detailed *Emergency Response Plans* for potential cyanide releases.

#### **MSC and Maersk**

Whilst AGR's product is embarked on MSC or Maersk vessels, all emergency response is governed by the vessel's captain. Due diligence reviews of MSC and Maersk were undertaken by AGR to ensure that the shipments are conducted in accordance with the IMO DG Code. AGR's due diligence reviews have found that there were no issues of concern in regards to the management and shipping of sodium cyanide product by either shipping line. In addition, through their dealings with the two shipping lines, AGR has found MSC and Maersk to be professional organisations.

All Maersk and MSC vessels are registered by the Lloyd's Register Group, which provides classification and certification of ships, and inspects and approves important components and accessories. This registration is a requirement of the Australian Customs Act.

#### **Port of Laem Chabang**


Both the Port Authority and the Centre operators maintain an Emergency Response Plan. Solid spills will be contained on the concrete pad and a liquid spill will drain to the collection channels, which collect and are handled within the sump area. JWD InfoLogistics Emergency Response Plan includes steps for a chemical spill. The ERT conducts regular training and exercises with Port Authorities and Fire and Rescue and a mock 'dangerous goods incident' exercise is held once every year to test the emergency response procedures. The ERT has been trained by the US Coastguard.

AGR does not have control over the handling of shipping lines and their cargo at the Port of Laem Chabang. The Port Authority's Harbour Master oversees the operation of the overall Port operations, including entities contracted to perform port operations.

AGR has undertaken a review of the port operations that the transportation, handling and storage of its sodium cyanide is to acceptable standards. The AGR due diligence report concludes that:

*"The ongoing review as a service provider and this due diligence report has found no issues of concern in regards to The Port Authority of Thailand and its lease operators..."*

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**2.3.2 Transport Practice 3.2**

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

**in full compliance with**

**The operation is**

in substantial compliance with

**Transport Practice 3.2**

not in compliance with

**Summarise the basis for this finding/deficiencies identified:**

The AGR Ocean Freight Supply Chain is in FULL COMPLIANCE with Transport Practice 3.2, requiring the operation to designate appropriate response personnel and commit necessary resources for emergency response.

**MSC and Maersk**

Whilst AGR’s product is embarked on MSC or Maersk vessels, all emergency response is governed by the vessel’s captain. AGR’s due diligence reviews have found that there were no issues of concern in regards to the management and shipping of sodium cyanide product by either shipping line. In addition, through their dealings with the two shipping lines, AGR has found MSC and Maersk to be professional organisations.

All Maersk and MSC vessels are registered by the Lloyd’s Register Group, which provides classification and certification of ships, and inspects and approves important components and accessories. This registration is a requirement of the Australian Customs Act.

**Port of Laem Chabang**


Both the Port Authority and the Centre operators maintain and Emergency Response Plan. Solid spills will be contained on the concrete pad and a liquid spill will drain to the collection channels, which collect and are handled within the sump area. JWD InfoLogistics Emergency Response Plan includes steps for a chemical spills. The ERT conducts regular training and exercises with Port Authorities and Fire and Rescue and a mock ‘dangerous goods incident’ exercise is held once every year to test the emergency response procedures. The ERT has been trained by the US Coastguard.

AGR does not have control over the handling of shipping lines and their cargo at the Port of Laem Chabang. The Port Authority’s Harbour Master oversees the operation of the overall Port operations, including entities contracted to perform port operations.

AGR has undertaken a review of the port operations that the transportation, handling and storage of its sodium cyanide is to acceptable standards. The AGR due diligence report concludes that:

*“The ongoing review as a service provider and this due diligence report has found no issues of concern in regards to The Port Authority of Thailand and its lease operators...”*

AGR Ocean Freight Supply Chain  
Name of Facility

  
Signature of Lead Auditor

9 November 2012  
Date



**2.3.3 Transport Practice 3.3**

**Develop procedures for internal and external emergency notification and reporting.**

**in full compliance with**

**The operation is**

in substantial compliance with

**Transport Practice 3.3**

not in compliance with

**Summarise the basis for this finding/deficiencies identified:**

The AGR Ocean Freight Supply Chain is in FULL COMPLIANCE with Transport Practice 3.3, which requires the operation to develop procedures for internal and external emergency notification and reporting.

**MSC and Maersk**

This Transport Practice does not apply to sodium cyanide transported by sea. Nonetheless, All Maersk and MSC vessels carrying AGR sodium cyanide have ship manifests held by the captain, which contain emergency response information and contact details.

In addition, Maersk and MSC vessels are registered by the Lloyd's Register Group, which provides classification and certification of ships, and inspects and approves important components and accessories. This registration is a requirement of the Australian Customs Act.

**Port of Laem Chabang**


Both the Port Authority and the Centre operators maintain and Emergency Response Plan. Solid spills will be contained on the concrete pad and a liquid spill will drain to the collection channels, which collect and are handled within the sump area. JWD InfoLogistics Emergency Response Plan includes steps for a chemical spills. The ERT conducts regular training and exercises with Port Authorities and Fire and Rescue and a mock 'dangerous goods incident' exercise is held once every year to test the emergency response procedures. The ERT has been trained by the US Coastguard.

AGR does not have control over the handling of shipping lines and their cargo at the Port of Laem Chabang. The Port Authority's Harbour Master oversees the operation of the overall Port operations, including entities contracted to perform port operations.

AGR has undertaken a review of the port operations that the transportation, handling and storage of its sodium cyanide is to acceptable standards. The AGR due diligence report concludes that:

*"The ongoing review as a service provider and this due diligence report has found no issues of concern in regards to The Port Authority of Thailand and its lease operators..."*

AGR Ocean Freight Supply Chain  
Name of Facility

  
Signature of Lead Auditor

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**2.3.4 Transport Practice 3.4**

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

**in full compliance with**

**The operation is**

in substantial compliance with

**Transport Practice 3.4**

not in compliance with

**Summarise the basis for this finding/deficiencies identified:**

The AGR Ocean Freight Supply Chain is in FULL COMPLIANCE with Transport Practice 3.4, which requires the operation to develop procedures for remediation of releases that recognise the additional hazards of cyanide treatment.

**MSC and Maersk**

This Transport Practice does not apply to sodium cyanide transported by sea. Nonetheless, All Maersk and MSC vessels carrying AGR sodium cyanide have ship manifests held by the captain, which contain emergency response information and contact details.

In addition, Maersk and MSC vessels are registered by the Lloyd's Register Group, which provides classification and certification of ships, and inspects and approves important components and accessories. This registration is a requirement of the Australian Customs Act.

**Port of Laem Chabang**


Both the Port Authority and the Centre operators maintain and Emergency Response Plan. Solid spills will be contained on the concrete pad and a liquid spill will drain to the collection channels, which collect and are handled within the sump area. JWD InfoLogistics Emergency Response Plan includes steps for a chemical spills. The ERT conducts regular training and exercises with Port Authorities and Fire and Rescue and a mock 'dangerous goods incident' exercise is held once every year to test the emergency response procedures. The ERT has been trained by the US Coastguard.

AGR does not have control over the handling of shipping lines and their cargo at the Port of Laem Chabang. The Port Authority's Harbour Master oversees the operation of the overall Port operations, including entities contracted to perform port operations.

AGR has undertaken a review of the port operations that the transportation, handling and storage of its sodium cyanide is to acceptable standards. The AGR due diligence report concludes that:

*"The ongoing review as a service provider and this due diligence report has found no issues of concern in regards to The Port Authority of Thailand and its lease operators..."*

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**2.3.5 Transport Practice 3.5**

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

**in full compliance with**

**The operation is**

in substantial compliance with

**Transport Practice 3.5**

not in compliance with

**Summarise the basis for this finding/deficiencies identified:**

AGR's Ocean Freight Supply Chain is in FULL COMPLIANCE with Transport Practice 3.5, which requires the operation to periodically evaluate response procedures and capabilities and revise them as needed.

**MSC and Maersk**

This Transport Practice does not apply to sodium cyanide transported by sea.

All Maersk and MSC vessels carrying AGR sodium cyanide have ship manifests held by the captain, which contain emergency response information and contact details. These manifests are updated as cargo is loaded and unloaded from the vessel at each Port.

In addition, Maersk and MSC vessels are registered by the Lloyd's Register Group, which provides classification and certification of ships, and inspects and approves important components and accessories. This registration is a requirement of the Australian Customs Act.

**Port of Laem Chabang**


Both the Port Authority and the Centre operators maintain an Emergency Response Plan. Solid spills will be contained on the concrete pad and a liquid spill will drain to the collection channels, which collect and are handled within the sump area. JWD InfoLogistics Emergency Response Plan includes steps for a chemical spill. The ERT conducts regular training and exercises with Port Authorities and Fire and Rescue and a mock 'dangerous goods incident' exercise is held once every year to test the emergency response procedures. The ERT has been trained by the US Coastguard.

AGR does not have control over the handling of shipping lines and their cargo at the Port of Laem Chabang. The Port Authority's Harbour Master oversees the operation of the overall Port operations, including entities contracted to perform port operations.

AGR has undertaken a review of the port operations that the transportation, handling and storage of its sodium cyanide is to acceptable standards. The AGR due diligence report concludes that:

*"The ongoing review as a service provider and this due diligence report has found no issues of concern in regards to The Port Authority of Thailand and its lease operators..."*

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### **3.0 SEA TRANSPORT SUMMARY**

#### **3.1 Mediterranean Shipping Company Australia Pty Ltd**

##### **3.1.1 Audit and Operational Information**

MSC Shipping is a carrier service providing International shipping of containers on a fleet of their container vessels.

A due diligence of MSC shipping was conducted by AGR in October 2010.

##### **3.1.2 Scope and Summary of Due Diligence Investigation**

The purpose of the due diligence was to ensure AGR shipping of sodium cyanide is conducted in accordance with the International Maritime Dangerous Goods Code (IMO DG Code). The following items were addressed within the AGR due diligence:

- Compliance with ICMC:
  - Transport Practice 1.1
  - Transport Practice 1.5
  - Transport Practice 1.6
  - Dangerous Goods Management.
- Australian Shipping Regulatory Framework:
  - Australian Maritime Safety Authority (AMSA)
  - International Convention for the Safety of Life at Sea (SOLAS)
  - Port State Control.
- Australian Department of Defence.

AGR concluded in the due diligence, that no issues of concern were noted in regards to MSC management and shipping of the sodium cyanide product. The due diligence also noted that the report is not a final acceptance of MSC for future work and as with all service providers to AGR; AGR will continue to review and monitor their performance. In particular, any changes in state, national or international regulations, standards or laws can result in a total review of the international shipping requirements. This due diligence report was reviewed by the audit team's transport technical auditor.


#### **3.2 Maersk Australia Pty Ltd**

##### **3.2.1 Audit and Operational Information**

Maersk is a carrier service providing International shipping of containers on a fleet of their container vessels. Containers containing sodium cyanide are placed and secured on their vessels at the loading port (Fremantle) by Patrick Stevedores and removed at Port of Walvis Bay by Namport (the Port Authority). Maersk has provided AGR with container shipping services since AGR commenced the export of sodium cyanide solid in 2002. At the commencement of AGR's export operations AGR had to prove to Maersk that its product packaging was approved by the Australian regulators and tested in accordance with IMDG Code.

A due diligence of Maersk shipping was conducted by AGR in October 2010.

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### 3.2.2 Scope and Summary of Due Diligence Investigation

The purpose of the due diligence was to ensure AGR shipping of sodium cyanide is conducted in accordance with the International Maritime Dangerous Goods Code (IMO DG Code). The following items were addressed within the AGR due diligence:

- Compliance with ICMC:
  - Transport Practice 1.1
  - Transport Practice 1.5
  - Transport Practice 1.6
  - Dangerous Goods Management.
- Australian Shipping Regulatory Framework:
  - Australian Maritime Safety Authority (AMSA)
  - International Convention for the Safety of Life at Sea (SOLAS)
  - Port State Control.
- Australian Department of Defence.

AGR concluded in the due diligence, that the due diligence found no issues of concern in regards to Maersk management and shipping of the sodium cyanide product. It was also noted that the due diligence was not a final acceptance of Maersk for future work and as with all service providers to AGR, AGR will continue to review and monitor their performance. In particular, any changes in state, national or international regulations, standards or laws can result in a total review of the international shipping requirements. The due diligence review was undertaken by the audit team's transport technical expert.

## 4.0 PORT SUMMARY

### 4.1 Port of Laem Chabang

#### 4.1.1 Audit and Operational Information

The Port of Laem Chabang is Thailand's premier deep sea port. AGR ships sodium cyanide to this port via MSC for end user mines in Thailand and Laos.


AGR undertook a due diligence assessment of the Port of Laem Chabang in October 2012.

#### 4.1.2 Scope and Summary of Due Diligence Investigation

The purpose of the due diligence was to ensure that the transportation, handling and storage of AGR's sodium cyanide at the Port is to acceptable standards. The following items were addressed within the AGR due diligence:

- Compliance with ICMC:
  - Transport Practice 1.1
  - Transport Practice 1.5
  - Transport Practice 1.6

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Name of Facility

  
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Date



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## AGR OCEAN FREIGHT SUPPLY CHAIN, SUMMARY AUDIT REPORT

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- Transport Practice 2.1.

The due diligence concluded that there were no issues of concern relating to awareness and management of the handling and transit of AGR's sodium cyanide. The due diligence also noted that the report is not a final acceptance of the Port of Laem Chabang as a future destination port and as with all service providers to AGR; AGR will continue to review and monitor their performance. This due diligence report was reviewed by the audit team's transport technical auditor.

AGR Ocean Freight Supply Chain  
Name of Facility

  
Signature of Lead Auditor

9 November 2012  
Date





## Report Signature Page

**GOLDER ASSOCIATES PTY LTD**

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# **APPENDIX A**

## **Limitations**



## LIMITATIONS

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