

# DIPLOMA IN SUSTAINABLE SUPPLY CHAINS, DIGITALISATION, LOGISTICS CUSTOMS & DANGEROUS GOODS AWARENESS

#### M<sub>0</sub>2

#### JUNE 2025 EXAMINATION

## Instructions to Candidates

- Duration of examination: 3 Hours
- Answer Section A Question 1 Compulsory and any THREE questions in Section B.
- Questions may be answered in any order.
- Allocation of marks is indicated along each question.
- Credit will be given for citing relevant examples.
- Write legibly.

## **QUESTION 1 Compulsory**

(40 marks)

## CMA Djakarta

In July 1999, the CMA Djakarta was off the coast of Cyprus when there was an explosion on deck followed by a fire. Despite significant efforts, the crew could not control the fire and further explosions occurred. The vessel was abandoned and subsequently grounded off the Egyptian coast where salvors took over. The fire was eventually put out and the vessel was towed to Malta as a port refuge and then to Croatia for repairs.

Investigations were carried out and it appeared that the explosions and fire on deck had been caused by a cargo of calcium hypochlorite. This product had self-combusted, possibly as a result of impurities, either due to the manufacturing process of such bleaching powder or as a result of contamination during transport. The chemical readily decomposes to release chlorine and oxygen. Some drums of calcium hypochlorite had a

propensity to undergo a self-accelerating decomposition reaction that concluded with an explosion releasing large clouds of thick white "smoke". The International Group of P&I Clubs paid a study where it was found that self-accelerating decomposition in a 40ft container could start at temperatures in the order of 37oC, a temperature well within the range of temperatures that could be expected during ocean voyages. This compound is of category X if concentration is > 50% or Y if it is bellow < 50%.



The results of this investigation led the shipowner of the CMA Djakarta to take the charterer to court. The London-based arbitrators decided that the transport of containers of dangerous substances violated the contract which expressly prohibited the shipment of "any goods of a dangerous, injurious, flammable or corrosive nature". The court's decision delivered in London in January 2002 sentenced the charterer to damages to cover repairs to the damaged vessel as well as an indemnity to compensate for costs incurred (salvage, cargo...). Meanwhile, the charterer established a limitation fund through the Commercial Court of Marseille, in compliance with the 1976 Limitation Convention.

The charterer appealed but in February 2004 the appeal was rejected by the London Court of Admiralty. The court confirmed that there was no limit of liability for the costs of vessel repair and salvage operations. However, it overruled the first judgement concerning indemnity for the loss of cargo. It decided that the charterers were entitled to limit their liability for this indemnity.

Adopted from: https://wwz.cedre.fr/en/Resources/Spills/Spills/CMA-Djakarta

a) Using your knowledge of customs, dangerous goods awareness and the information from the case above, critically evaluate the economic, social and environmental impacts caused. (20 marks)

- b) Discuss the characteristics of any five (5) dangerous goods classes you are familiar with. (10 marks)
- c) Explain with practical examples any five (5) benefits of adhering to the use of dangerous good segregation and compatibility chart. (10 marks)

## **SECTION B**

Answer any THREE questions.

### **QUESTION 2**

a) Differentiate Harmonised System (HS) codes from United Nations (UN) Numbers.

(10 marks)

Discuss the merits and demerits of deferment of payment of customs duties for pesticides, insecticides and herbicides by manufacturers in Zimbabwe during the farming season.

(10 marks)

## **QUESTION 3**

Discuss with examples the importance of transporters of dangerous goods outsourcing the services of shipping and clearance agents. (20 marks)

## **QUESTION 4**

Discuss the relationship and synergy between Environmental Management Agency (EMA) and Customs authorities regarding hazardous substances and waste management in Zimbabwe. (20 marks)

### **QUESTION 5**

a) Define the following terms as they apply to customs and dangerous goods awareness.

b)

i.	Harmonized System (HS) code	(2 marks)
ii.	International Air Transport Association (IATA)	(2 marks)
iii.	Eco-friendly reverse logistics.	(2 marks)
iv.	Customs Clearance Certificate	(2 marks)
٧.	Material Safety Data Sheet (MSDS)	(2 marks)

c) Discuss with practical examples why licensed companies which trade but do not have a warehouse must not store Dangerous Goods at any place, but transport them directly from port to users.
 (10 marks)

## **QUESTION 6**

- a) Describe the legal responsibilities of the company transporting dangerous goods from Chipata, a town in Zambia to Zimbabwe (15 marks)
- b) Outline any five factors to be considered when selecting a mode of transport for the importation of Bronco chemical from China. (5 marks)