

COPY NO. \_\_\_\_\_



## HANDLING OF DANGEROUS GOODS POLICY MANUAL

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## 1 Revision History and Approval

Rev.	Nature of changes	Approval	Date
1.0	Original release.	BVIPA Board	18.3.2021

## **2 Introduction**

### **2.1 The British Virgin Islands Ports Authority**

**Dangerous Goods** are substances which may be capable of causing harm to people, property and the environment because of their hazardous properties. In port areas these kinds of cargo need to be carefully controlled to ensure the safety and security of the port, of all persons in or around the port, and the protection of the environment. This manual sets out the British Virgin Islands Port Authority's (BVIPA) policies and procedures to secure the safe handling and transport of dangerous cargoes in harbours and ports operated by BVIPA.

### **3 Terms and Definitions**

This manual adopts the following terms and definitions:

BVI	British Virgin Islands
BVIPA	British Virgin Islands Port Authority
CTU	Container Transport Unit
DDM	Department of Disaster Management
DWM	Department of Waste Management
IMDG	International Maritime Dangerous Goods Code
MCA	Maritime & Coastguard Agency
MNRLI	Ministry of Natural Resources, Labour and Immigration
OT	Overseas Territory
PPE	Personal Protective Equipment
RVIPF	Royal Virgin Islands Police Force
UKSI	United Kingdom Statutory Instrument
VISR	Virgin Islands Shipping Registry

## **4 The Scope and Context**

According to the International Maritime Dangerous Goods Code (IMDG Code),

*“Carriage of dangerous goods by sea is regulated in order reasonably to prevent injury to persons or damage to ships and their cargoes. Carriage of marine pollutants is primarily regulated to prevent harm to the marine environment. The objective of the IMDG Code is to enhance the safe carriage of dangerous goods while facilitating the free unrestricted movement of such goods”.*

The British Virgin Islands Ports Authority (BVIPA) has the responsibility under the British Virgin Islands Ports Authority Regulations, 1995, “to control the conditions in the British Virgin Islands on the waterways, harbours, and ports under which dangerous goods are transported, handled, and stored upon import to into or export from the British Virgin Islands.”

This Plan seeks to ensure consistent implementation of standard operation procedures for the handling dangerous goods which will be in compliance with international and local Laws. The procedures are intended to comprehensively sensitize staff, agents, port users, and the general public of the requirements relating to adequately handling, transporting and storing dangerous goods and other hazardous materials while in the jurisdictional area.

The enforcement of this plan will be by the British Virgin Islands Ports Authority specifically while the goods are within the confines of a Ports Facility. Port users are obligated to ensure compliance with law which may apply to their activities. Port users should be aware of the British Virgin Islands Ports Authority Dangerous Goods Plan as failure to comply may result in enforcement action by the Authority or the Virgin Islands Shipping Registry.

## **5 Existing Legislation**

Applicable legislation governing the movement of Dangerous Goods into a controlled area are listed below.

### **Domestic Legislation**

- a) The Constitution of the Virgin Islands 2007
- b) The British Virgin Islands Ports Authority Act 1990
- c) The British Virgin Islands Ports Authority Regulations, 1995.

### **Extended Legislation**

- d) Merchant Shipping Act 1884 (UK)

### **Adopted Legislation**

- e) Merchant Shipping (Gas Carriers) Regulations 1994 (UK)
- f) Merchant Shipping (Reporting Requirements for Ships Carrying Dangerous or Polluting Goods) Regulations 1995
- g) Merchant Shipping (Dangerous Goods and Marine Pollutants) Regulations 1997
- h) Merchant Shipping (Carriage of Packaged Irradiated Nuclear Fuel etc) (INF Code) Regulations 2000

### **International Context**

- i) The United Nations Convention on the Law of the Sea
- j) The International Convention for the Safety of Life at Sea (SOLAS) 1974
  - a. The International Maritime Dangerous Goods (IMDG) Codes

See further details in Appendix 1: LEGAL CONTEXT.

#### **5.1 Scope of the Management System**

As an Overseas Territory (OT) of the United Kingdom and member of the Red Ensign Group of Shipping Registers, the British Virgin Islands is subject to comply with domestic, UK and International Law.

The Virgin Islands Shipping Registry (VISR) is the national competent authority within BVI for the enforcement of SOLAS and for the supervision of BVI flagged vessels.

UK Maritime and Coastguard Agency (MCA), are responsible for regulating all harbours and ports in the UK and oversee Shipping Registries in the OTs through management of the Red Ensign Group.

The BVIPA is responsible for the operation of declared harbours and ports in the BVI.

This manual details BVIPA actions to review and update procedures for handling cargoes which are classified as dangerous in accordance with the International Maritime Dangerous Goods (IMDG) Code.

The manual submitted for approval to Premier, *the Minister responsible for maritime transportation in the BVI*, through the Virgin Islands Shipping Registry (VISR), to verify that BVIPA is in compliance with domestic and international requirements for the handling of dangerous goods.

## **6 Strategic Direction**

BVIPA identifies the following stakeholders as having interested in the implementation of Dangerous Goods Handling Policy and Procedures.

### **Internal**

- Minister responsible for BVI Ports Authority
- BVIPA Board
- Managing Director
- Operations Department
- Security Department
- Business Development (Customer Satisfaction)
- Compliance Department
- Port Users, Shippers, Agents, Masters, and Ship Owners
- Port employees

### **External**

- General public in the areas surrounding the ports.
- Virgin Islands Shipping Registry
  - conducts an audit of compliance by BVI agencies every **2** years
- Marine and Coastguard Agency (UK)
  - conducts an audit of compliance by red ensign members every **5** years
- International Maritime Organization
  - conducts an external audit of compliance with international maritime obligations every **7** years.

BVIPA understands that the core functions affected by dangerous goods handling requirements to be supervision and delivery of the following services.

- Transportation by sea (providing berthage and permission for off-shore moorings of vessels and unloading cargo).
- Transportation by land (handling and loading cargo on vessels).
- Storage and warehousing of cargo.

### **Statement of Strategic Direction**

**Within the constraints of operating as the Port Authority of a small-island developing state, BVIPA resolves to move forward in the direction of ensuring compliance to the fullest extent possible with IMDG requirements in all BVI port facilities involved in the international shipment and handling of all dangerous cargo in accordance with all applicable domestic and extended legislation.**

Failure to discharge legal duties identified above could result in following consequences:

- injury to port employees or users or the public;

- harm to the environment;
- damage to port property and to private property surrounding the port;
- liability for breach of constitutional duty;

*Also*

- damage to the BVI Port Authority reputation;
- damage to the BVI international reputation and reputation of the Red Ensign Group; and
- Impact to Category I status and reduction in revenue to the Territory as a result of non-compliance with the requirements of the III Code.

### 6.1 Coming into Effect

The British Virgin Islands Ports Authority Handling of Dangerous Goods Policy will come into effect **February 1, 2021**

### 6.2 Application

This Policy will apply to:

- BVIPA Board
- BVIPA employees involved in an administrative or operational capacity in handling of dangerous goods
- All Agents, Members of the Public, Ship Owners and other ship operators accessing the facilities at the Port
- All BVI flagged vessels
- All vessels within BVI harbours or ports not excluded by s.6.4 below

### 6.3 Facilities Subject to this Policy

The Dangerous Goods Policy applies to all processes, activities, and employees of the following locations within the BVIPA:

Harbour	Dock/Terminal
Road Harbour	Port Purcell Facility Tortola Pier Park Facility
St Thomas Bay Harbour	Spanish Town
Other	*any oil terminal

### 6.4 Permissible Exclusions

The following are excluded:

- warships and other ships for the time being used by the government of any State for non-commercial purposes,
- purely domestic cargo voyages
- bunkers stores and equipment for use on board a ship

The following sites are excluded from the Dangerous Goods Policy at this time, because they do not receive international cargo traffic. In the future, these may be incorporated into the scope of this policy and this manual will be updated accordingly.

<b>Harbour</b>	<b>Dock/Terminal</b>
Great Harbour JVD	Dog Hole
n/a	Gun Creek
n/a	Anegada Dock

## **7 Dangerous Goods Handling Policy**

In accordance with our mission to provide superior quality seaport facilities and services, the BVIPA shall provide a safe and secure system for the transportation and handling of dangerous goods within port facilities by ensuring:

- BVIPA remains aware of, in compliance with and administers all applicable local and extended legislation.
- BVIPA co-operates fully in the implementation of international agreements.
- All ships, agents, port users, and employees are made aware of the guidelines for handling of dangerous goods within BVIPA facilities.
- The systems and procedures covering all aspects of port operations involving dangerous goods are documented.
- All employees handling dangerous goods are trained and provided with safety equipment where required.
- No dangerous goods are received into or shipped from the port in contravention of IMDG measures.

## **8 Dangerous Goods Handling Procedures**

BVI Ports Authority is required to implement sound operational procedures to secure the safe handling of dangerous goods throughout our facilities. These procedures must enable the identification, assessment and control of risks associated with the handling of Dangerous Goods. The procedures must also take due account of best international practices, in particular the International Maritime Organization's (IMO) recommendations, in relation to the safe transport of dangerous cargoes and related activities in port areas.

### **8.1 Process Identification**

BVIPA has identified the following processes for the management of dangerous goods:

- Legal Analysis and Guidance
- Classification, Packing and Labelling
- Notification and Documentation
- Transportation by Sea (Berthing and Unloading)
- Transportation by Land (Arrival and Loading)
- Safe handling and segregation
- Incident Reporting
- Emergency Response
- Occupational Health and Safety
- Security
- Employee Training
- Communication with Port Users

- Review and Reporting

## 8.2 Classification, Packing and Labelling

All Dangerous Goods being transported into or within Territorial Waters and in the controlled port areas require proper labeling with the appropriate symbols in accordance with the International Maritime Dangerous Goods (IMDG) Codes. The consignor or sender is responsible for ensuring that dangerous goods are properly classified, packaged and marked for safe transporting purpose.

KPI: No. non-conforming packages identified

### Classification

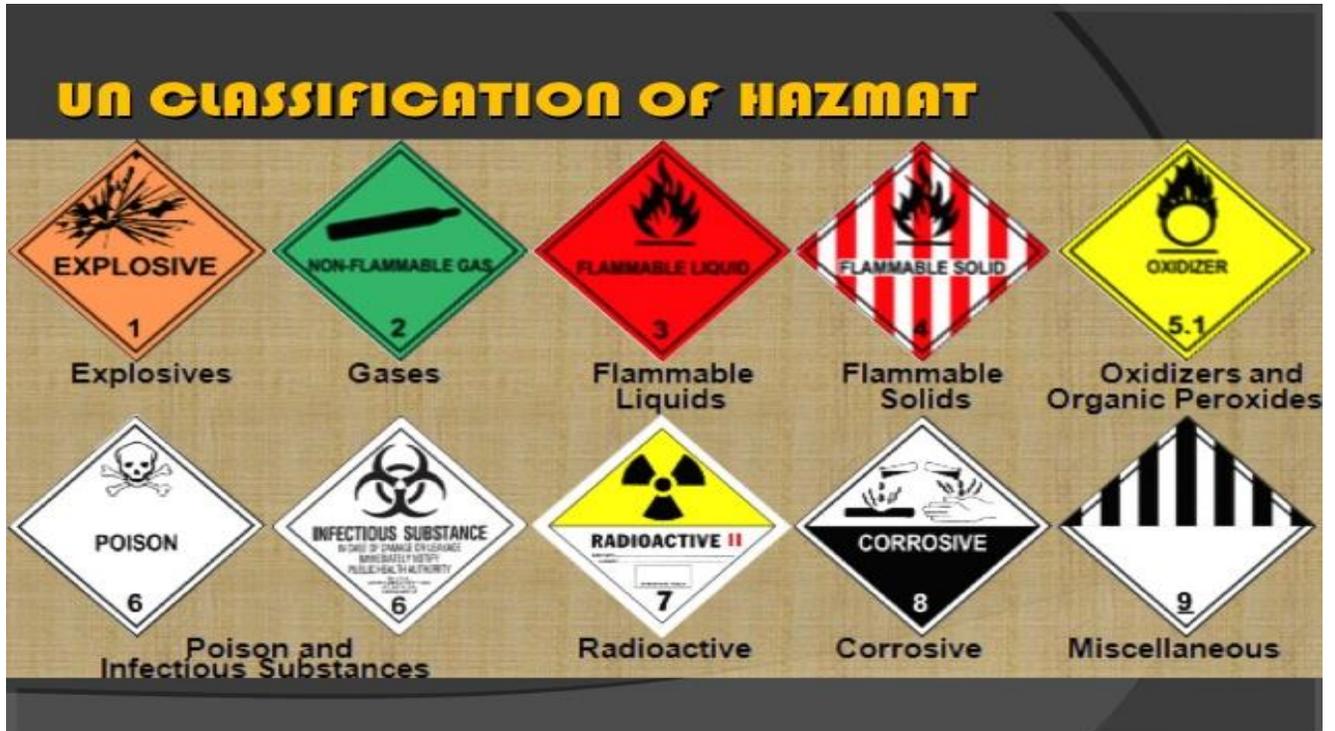
In keeping with the IMDG Code and the BVI Ports Authority Regulations, dangerous goods are classified and categorized according to specific characteristics and their risks value. The Table 1 below describes the classes and categories.

**Table 1: Classification of Dangerous Goods as per the BVIPA Regulations and MCA**

Class	Dangerous Goods	Classification
Class 1	Explosives	Explosives
Class 2	Gases	Gasses, compressed, liquefied or dissolved under pressure
Class 3	Flammable liquid	Flammable liquids
Class 4.1	Flammable solids	Flammable solids
Class 4.2		Spontaneously combustible substance
Class 4.3		Substance which emits flammable gas in contact with water
Class 5.1	Oxidizers and organic peroxides	Oxidizing substances
Class 5.2		Organic peroxides
Class 6.1	Toxic and infectious substances	Toxic Substance
Class 6.2		Infectious substances
Class 7	Radioactive materials	Radioactive substance

Class 8	Corrosive substances	Corrosive substance
Class 9	Miscellaneous dangerous	Miscellaneous dangerous substances

Figure 1: Placards for Dangerous Goods



### UN Numbers and proper shipping names

All Cargo must be identified by United Nation (UN) Number and Proper Shipping name. The UN Number is a four-digit numbers used to identify dangerous goods and hazardous substances in based on the primary and secondary hazards posed by the item. Transportation and Dangerous Goods numbers are assigned by the United Nations Committee of Experts.

*See details on classification in Appendix 2*

### 8.3 Notifications

The BVIPA must be notified prior to any Dangerous Goods entering our harbours or port facilities, by sea or land. This includes Dangerous Goods in transit, or Dangerous Goods to be loaded or

unloaded at a terminal not controlled by BVIPA. This notification is crucial to the safe management of the harbour or port, particularly in the case of an incident.

The Ship's Agent is required to provide written notification to the BVIPA as well as to the competent authority (VISR) all of the information listed in Schedule 1 of the Merchant Shipping Notice M 1630 prior to the ship departing from or arriving in the BVI port or anchorage. The notification must be accompanied with a copy of the pre-manifested entries and it must be received a minimum of forty-eight (48) hours prior to the ship's arrival in Territorial Waters

*See notification forms in Appendix 2*

#### **8.4 Transportation by sea (Berthing and Unloading)**

Written notification to the BVIPA of a minimum of forty-eight (48) hours prior to the arrival of a vessel in Territorial Waters is required for dangerous goods. The Agent must make arrangements for the clearance and removal of dangerous goods in categories 1, 3, 4, 6, 7, and 8 within two (2) hours of the vessel receiving clearance to discharge cargo into the BVI.

During loading and unloading the Master must ensure

- The person appointed to supervise the operations shall take and/or cause to be taken all due precautions as are necessary under the IMDG Code and the BVIPA regulations.
- Repairs to any part of the vessel necessitating the use of open flame/open fire are not carried out.
- Vessel's engine and auxiliary gear are to be available for immediate movement of the vessel if required.
- No bunkering to be carried out during loading/unloading of dangerous cargo.

#### **8.5 Transportation by land (Arrival and Loading)**

Written notification to the BVIPA of a minimum of forty-eight (48) hours prior to accessing a Port's facility is required for dangerous goods. The dangerous goods must be properly labeled in accordance with IMDG Codes. Upon entry onto the port facility, Security will inspect the dangerous good to ensure safe containment and categorization and labeling. The Security Officer alert the Operations Department of the arrival and provide instructions as to the correct berth. In most cases dangerous goods must be taken directly to the vessel, not stored. The Agent shall be held liable and must therefore make arrangements to have the dangerous goods removed from the port facility within two (2) hours of receiving clearance to discharge cargo at a Port Facility during normal operational hours.

Visitors are to be kept at a minimum during loading and unloading operations. Safety orientation of the port users must be carried out prior to boarding.

## **8.6 Segregation and Safe Storage of Dangerous Goods**

Based upon the documented information received regarding type of dangerous goods being handled, the assigned **Warehouse Supervisor** must ensure the required segregation and environmental conditions are always maintained. The storage area must be protected and identified as “Restricted access / for authorized personnel only”. The determining perimeters can be referenced in the IMDG Codes or the UN Model Regulations, understanding that certain Dangerous Goods are incompatible with other goods. They may also present a risk if exposed to high temperatures, solar radiation, or moisture etc. This includes Dangerous Goods being transported through a port area.

## **8.7 Time Limitations**

The storage limitations of Dangerous Goods apply to imports, exports, transshipments, and transit cargoes that are being re-stowed.

Storage of dangerous goods CTUs will not be permitted at the port. All Dangerous Goods CTUs requiring storage must be removed to a suitable facility offsite.

According to the British Virgin Islands Ports Authority Regulations any Dangerous Goods landed for arrival or shipment shall be removed from the port no later than 18:00hrs each day.

## **8.8 Occupational Health and Safety**

BVIPA is required by the BVI Labour Code 2010 to preserve the health, safety and welfare of employees in the workplace and prevent industrial accidents. Suitable protective clothing must be provided for employees who are involved in any process where they are exposed to offensive substances.

KPI: Inventory of PPI available / used

## **8.9 Reporting of Incidents at Sea**

All Agents or Ship Operators in port are required to report any incidents involving dangerous or hazardous materials forthwith to the BVIPA in order to mitigate further risk and liability while in Territorial Waters or while berthed at a port’s facility in accordance with [IMO Resolution A.851\(20\)](#).

[Incident reports should also include near misses. The knowledge gained from incident report forms shall be used for continual improvement and trend analysis.](#)

*See Appendix 3: Incident at Sea Report*

## **8.10 Leaking CTU’s**

In the event, that a leaking Dangerous Goods CTU is detected after the submission of a Dangerous Goods notification, the vessel Master and / or the Agent must immediately amend the declaration and nominate the leaking container and / or associated issue. In addition, BVIPA must be supplied with:

- The MSDS for the product(s);
- The manifest for the CTU;
- The 24 hour contact details of the:
  - Transport company;
  - Storage facility; and
  - Importer.

### **8.11 Emergency Preparations**

Each terminal or berth operator must have a written emergency plan in place for dealing with any dangerous situation arising from the transport or handling of Dangerous Goods. All persons engaged in transport or handling Dangerous Goods in a port area must be aware of the emergency plan, and competent in operating any necessary response equipment that they may be required to use.

Any safety equipment that may be required for an emergency must be readily available.

(BVIPA Oil Pollution Contingency Plan response procedures shall also apply to dangerous goods emergency).

#### **8.11.1 Pre-Arrival Contingency Plan**

Prior to the arrival of a vessel with dangerous cargo the Director of Operations will hold an emergency response briefing to review contingency plan for the vessel's arrival.

#### **8.11.2 Emergency Drills**

Emergency drills will be conducted at an interval of three months and may be combined with oil pollution response training drills. Each drill will be conducted as simulation at each port randomly, where the team will be able to execute their tasks learned. The simulations would consist of different scenarios where the team would be able to go through the whole procedure while being hands-on with the equipment that will be used to clean up a spill.

### **8.11.3 Inspection of Dangerous Cargo**

At periodic intervals, the Director of Operations will conduct period checks of agents/transporters.

### **8.12 Security**

All port personnel, including employees and port users that transport, handle or store Dangerous Goods must adopt, implement and comply with a Security Plan.

- Authorized personnel should specify locations and responsibilities.
- Keep records of Dangerous Goods transports (import and export).
- Clear statements of security measures.
- effective and up-to-date procedures for reporting and dealing with security threats, breaches, or incidents.
- Procedures for evaluating and testing security plans and periodically updating them.

Only key personnel must be allowed access to the Dangerous Goods security plan, and any supporting information must be kept secure. The security plan should include a list of people authorized to have access to this information.

### **8.13 Employee Training**

All BVI employees involved in handling or supervising dangerous goods are to be trained in the requirements of IMDG code and all safety procedures. The IMDG Code requires that personnel directly facilitating the receipt, storage and movement, and delivery of dangerous goods should be trained under the IMDG Code and more specifically as port facility personnel engaged in the transport of Dangerous Goods they must be aware of the security requirements for such goods commensurate with their responsibilities.

Security personnel are required to also engage in bi-annual training, to ensure compliance with III Code requirements.

In the event of any Dangerous Goods accident, with the risk of exposure each employee should have adequate training on the following:-

1. proper use of handling and packaging of equipment's, the methods, procedures for avoiding accidents and the appropriate procedures of Dangerous Goods storage;

2. how to use the available emergency response information;
3. knowledge of the various classes of Dangerous Goods and how to prevent exposure to such hazards and if appropriate, the use of personal protective clothing and equipment;
4. In the event of an unintentional release of Dangerous Goods, employees should follow the immediate procedures including any emergency procedures.

#### **8.14 Consultation**

Statutory agencies and authorities that may be required to respond to a dangerous goods incident at the ports shall be consulted prior to finalization of this plan. These include:

- Virgin Islands Shipping Registry
- Ministry of Natural Resources, Labour & Immigration, Environment Division
- Department of Disaster Management
- Department of Fisheries & Agriculture
- Department of Waste Management
- National Parks Trust
- Royal Virgin Islands Police Force
- Fire & Rescue Department
- Department of Environmental Health

#### **8.15 Communication with Port Users**

All Port Users will receive regular updates notifying them of any changes or developments in procedures as a consequence of improvements to the dangerous goods handling system or as a result of domestic legislative changes or overseas amendments adopted into BVI law

#### **8.16 Review and Reporting**

The Director of Compliance will prepare and the Board will review an Annual Report and summary of compliance with DG policy with any recommendations for improvement.

## **9 Outsourced Processes**

### **9.1 Legal Analysis and Guidance:**

The BVIPA relies on the VISR (competent authority) and the Attorney Generals Chambers (legal advisor to Government) to provide BVIPA with notifications of changes and updates to IMO instruments, UK extended legislation and MCA guidance impacting port operations.

The Managing Director BVIPA receives these notifications and forwards to the attention of the relevant department head for action and inclusion in operational policies and procedures.

## **10 Documentation & Records**

All consignments of dangerous goods should be accompanied by a transport document declaring the description and nature of the goods when they are being transported.

The BVIPA shall therefore keep a Log of dangerous goods shipment and shall document the movement of the dangerous goods from arrival to departure on the port facility.

For any reason and at any time the consignor mis-declare or un-declare dangerous goods thereby causing undue exposure or harm to the BVIPA staff, other government agencies staff and other port users, the BVIPA will consider this an act of due negligence and as a result will hold the consignor liable for any harm or damage seen or unforeseen.

Providing false information on consignment documents is also an offence which may be prosecuted.

### **10.1 Records**

The Records generated by this Plan shall be as follows:

- Schedule 1 Notices: Merchant Shipping Notice M 1630 retained by Operations Department and by Agents for up to 6 months
- Dangerous goods Log at Security -
- Pilots Report of Failure to receive Checklist
- Declaration of Compliance with IMDG Code
- Reports of Incidents at Sea
- Reports on Emergency Responses
- Training log record
- Notices issues to Port Users
- Annual Report & Review
- Revised Dangerous Goods Plan

## **11 Management & Leadership**

### **11.1 Management Leadership and Commitment**

The Board of BVIPA provides evidence of its leadership and commitment to the development and implementation of the dangerous goods policy and continually improving its effectiveness by:

- a) taking accountability of the effectiveness of the dangerous goods handling system;
- b) ensuring that ***Dangerous Goods Handling Policy*** and objectives are established and are compatible with the strategic direction and the context of the organization;
- c) ensuring that the dangerous goods handling policy is communicated, understood and applied within the organization;
- d) ensuring that the resources needed for the dangerous goods handling system are available;
- e) communicating the importance of effective dangerous goods management and of conforming to the management system requirements;
- f) ensuring that the dangerous goods handling system achieves its intended results;
- g) promoting continual improvement;

### **11.2 Customer Focus**

In accordance with BVIPA vision to become the regional leader in providing efficient seaport facilities where customer satisfaction is paramount, the Board of the BVIPA mandates that customer needs and expectations are to be determined, and regulatory requirements met in such a manner as to enhance customer satisfaction.

### **11.3 Management Review**

The Board of BVIPA reviews the dangerous goods handling system, at planned intervals, to ensure its continuing suitability, adequacy and effectiveness. The review includes assessing opportunities for improvement, and the need for changes to the management system, including the ***Dangerous Goods Handling Policy*** and its objectives.

Records from management reviews are maintained.

## **12 Provision of Resources**

The Board of BVIPA will determine and provide the resources needed to implement and maintain the dangerous goods handling system and continually improve its effectiveness.

Resource allocation is done with consideration of the capability and constraints on existing internal resources, as well as constraints due to BVI being a small island developing state.

Resources and resource allocation are assessed during management reviews.

### **12.1 Human Resources**

The Board of BVIPA will ensure that it provides sufficient staffing for the effective operation of the dangerous goods handling system, as well its identified processes.

Training and subsequent communication will ensure that staff are aware of:

- a) the Dangerous Goods Handling policy;
- b) relevant safety objectives;
- c) their contribution to the effectiveness of the dangerous goods handling system, including the benefits of improved performance;
- d) the implications of not conforming with the management system requirements.

### **12.2 Infrastructure**

The Board of BVIPA determines, provides and maintains the infrastructure needed to achieve safe and secure handling of dangerous goods in order to prevent causing harm to people, property and the environment because of their hazardous properties. Infrastructure includes, as applicable:

- a) buildings, warehouse space and associated facilities;
- b) protective gear & emergency equipment
- c) information and communication technology.

### **12.3 Organizational Knowledge**

The BVIPA also determines the knowledge necessary for the operation of its processes and to achieve conformity of dangerous goods handling system. This may include knowledge and information obtained from:

- a) internal sources, such as lessons learned, feedback from subject matter experts, and/or intellectual property;
- b) external sources such as standards, academia, conferences, and/or information gathered from customers or suppliers.

This knowledge shall be maintained, and made available to the extent necessary.

When addressing changing needs and trends, the BVIPA shall consider its current knowledge and determine how to acquire or access the necessary additional knowledge.

## 13 Operations

### 13.1 Identification of responsible parties

<b>Managing Director</b>	<ul style="list-style-type: none"><li>• Is in charge of the overall operations of the ports facilities, the assignment of responsibilities and co-ordinates the different parties in the execution of their duties in the plan</li><li>• Monitoring implementation of the plan</li><li>• Implementing annual review</li></ul>
<b>Director of Operations &amp; Operations Team</b>	<ul style="list-style-type: none"><li>• ensures the dangerous goods handling system conforms to applicable standards;</li><li>• ensures that dangerous goods handling processes are delivering their intended outputs;</li><li>• reports on the performance of BVIPA handling of dangerous goods to the MD;</li><li>• provides recommendations for improvement in the dangerous goods handling;</li><li>• ensures the promotion of customer focus throughout the organization;</li><li>• ensures that the integrity of the dangerous goods handling system is maintained when changes are planned and implemented.</li><li>• Takes corrective action to prevent recurrence nonconformity; and takes preventive action to eliminate potential nonconformities in order to prevent their occurrence</li></ul>
<b>Director of Compliance</b>	<ul style="list-style-type: none"><li>• conducts internal audits at planned intervals to determine whether the dangerous goods handling system conforms to regulatory requirements and whether the system has been effectively implemented and is being maintained</li><li>• is responsible for identifying any difficulties that arise in compliance with this Plan and recommending corrective actions.</li><li>• is responsible for ensuring that operations are undertaken in line with company policy and risk assessments.</li></ul>
<b>Business Development Department Manager</b>	<ul style="list-style-type: none"><li>• is responsible for receiving, processing and following up on customer complaints.</li></ul>
<b>Security Manager</b>	<ul style="list-style-type: none"><li>• is responsible for ensuring the Agents operate as approved and that dangerous goods entering and leaving the facility are properly recorded in the security log</li><li>• Maintenance of Dangerous Goods Log Book</li></ul>

## **14 DANGEROUS GOODS IMDG SPECIFIED CLASSES**

### **14.1 Overview**

Dangerous Goods are assigned to one of nine classes according to their hazard or the most predominant of the hazards they present. These hazards may require specific measures be taken to manage risk.

Very few categories of dangerous goods are received at the BVI Ports. The majority are landed through Port Purcell.

BVIPA does not receive solid bulk cargo.

BVIPA has experienced the transit of the following types of packaged dangerous goods through its facility:

- Chlorine
- Diesel
- Gasoline
- Sodium Hydroxide
- Oxygen Tanks
- Fireworks
- Dynamite
- Propane Fuel
- LPG
- Batteries
- Sulphuric Acid
- Fiberglass Resin
- Oil

### **14.2 Handling Procedures**

#### **IMDG Class 1 – Explosives**

Direct to Motor Vehicle - Class 1 Dangerous Goods need to be removed from B.V.I.P.A site immediately and must be Direct to Motor Vehicle (DMV). Goods remain on the vessel while Agent clears the shipment with customs. Once all fees are paid the Operations Department issues a gate pass. Transportation may then enter the port and drives directly to the berth for the goods to be unloaded and removed from the port.

IMDG Class 2 – Compressed and Liquefied Gases  
IMDG Class 3 – Flammable Liquids  
IMDG Class 4 – Flammable Solids  
IMDG Class 5 – Oxidizing Substances

**IMDG Class 6, 8, 9**

IMDG Class 6 – Toxic Substances  
IMDG Class 8 – Corrosive Substances  
IMDG Class 9 – Miscellaneous

The objective is to minimize hazard levels on port compound. Dangerous goods with this receipt and dispatch classification should be exchanged within a maximum of 72 hours of the vessels' arrival or departure respectively. All parties involved should work to either load the goods to the vessel, or arrange transport to remove the goods as quickly as possible. The goods may be landed and stored in wharf areas temporarily within the total 72 hour time frame. The only exception to this requirement is when Customs are exercising their powers in regard to a shipment.

**IMDG Class 7 – Radioactive Substances**

Direct to Motor Vehicle - Class 7 Dangerous Goods need to be removed from BVIPA site immediately and must be Direct to Motor Vehicle (DMV). The Ministry of Health's Office of Radiation Safety administers the Radiation Protection is responsible for classification, storage, transport and packaging approval for Class 7 (radioactive material). For information on the transport of Radioactive materials contact the Ministry of Health.

## 15 References

MCA. Vessel Traffic Monitoring Notification and Reporting Requirements: MSN1899 (M+F)<sup>1</sup>  
Rota Port Facility Dangerous Goods Safety Guide 30.1.2020

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<sup>1</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/858748/MSN\\_1899\\_\\_M+F\\_\\_Vessel\\_Traffic\\_Monitoring\\_Notification\\_and\\_Reporting\\_Requirements\\_for\\_Shops\\_and\\_Ports.1.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/858748/MSN_1899__M+F__Vessel_Traffic_Monitoring_Notification_and_Reporting_Requirements_for_Shops_and_Ports.1.pdf)

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## **APPENDIX 1: LEGAL CONTEXT**

### **Legal Context**

#### **Dangerous Goods Handling**

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## **1 SUMMARY**

This document defines the wider legal context and the specific legal obligations binding on the BVI Ports Authority (BVIPA) as the designated operator for port and harbour facilities within the Territory of the Virgin Islands or British Virgin Islands (BVI).

## **2 OBJECTIVES**

To review and keep under review all current legal obligations in relation to the handling of dangerous goods which impact the manner in which port operations and services are to be delivered.

To identify services, processes and procedures required for BVIPA to comply with all relevant domestic and extended regulatory requirements.

## **3 DEFINITION OF DANGEROUS GOODS**

The Port Authority Regulations define “dangerous goods” as

- substances and things classified as “dangerous goods” by the International Convention on the Safety of Life at Sea;
- any explosives within the meaning of the Explosives Act
- any petroleum or petroleum spirit within the meaning of the Petroleum Act.

## **4 International Context**

The United Kingdom has extended application of the following treaties to the British Virgin Islands.

### **4.1 United Nations Convention of the Law of the Sea**

*Extended to the BVI on*

UNCLOS is the treaty which codifies international law on use of the sea, safety at sea and protection of the marine environment. Pursuant to Article 23 any foreign nuclear-powered ships or ships carrying nuclear or other inherently dangerous or noxious substances, when exercising the right of innocent passage through BVI territorial sea, are required to carry documents and observe special precautionary measures established for such ships by international agreements.

### **4.2 International Convention for the Safety of Life at Sea (SOLAS) 1974**

*Extended to BVI 10 Jun 2004*

Dangerous goods must be transported in accordance with the provisions of SOLAS, which sets out the minimum standards for the construction, equipment and operation for the safety of ships. Chapter VII requires carriage of

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<sup>2</sup> Excerpts, Knightwood Legal, BVI Report on Maritime Legislation Appendices

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dangerous goods to be in compliance with the relevant provisions of the **International Maritime Dangerous Goods Code (IMDG Code)**.

Part A deals with the carriage of dangerous goods in packaged form and Part A-1 with the carriage of dangerous goods in solid form in bulk and includes provisions for their classification, packing, marking, labelling and placarding, documentation and stowage.

Part B covers the construction and equipment of ships carrying dangerous liquid chemicals in bulk and requires chemical tankers to comply with the **International Bulk Chemical Code (IBC Code)**.

Part C covers the construction and equipment of ships carrying liquefied gases in bulk and requires gas carriers to comply with the **International Gas Carrier Code (IGC Code)**.

Part D includes special requirements for the carriage of packaged irradiated nuclear fuel, plutonium and high-level radioactive wastes on board ships and requires ships carrying such products to comply with the **International Code for the Safe Carriage of Packaged Irradiated Nuclear Fuel, Plutonium and High-Level Radioactive Wastes on Board Ships (INF Code)**.

#### **4.3 Convention for the Prevention of Pollution from Ships (MARPOL 73/78)**

*extended to BVI 19 Jun 2006 (Annex I - V); extended 9 Sep 2013 (Annex VI)*

Annex III: Prevention of Pollution by Harmful Substances Carried by Sea in Packaged Form- Contains general requirements for the issuing of detailed standards on packing, marking, labelling, documentation, stowage, quantity limitations, exceptions and notifications. "Harmful substances" are those substances which are identified as marine pollutants in the International Maritime Dangerous Goods Code (IMDG Code) or which meet the criteria in the Appendix of Annex III.

## **5 DOMESTIC LEGISLATION**

### **5.1 Constitution of the Virgin Islands**

Section 29 of the 2007 Constitution of the Virgin Islands provides a Right to Protection of the Environment stating, among other things, that every person has the right to have the environment protected for the benefit of present and future generations through such laws as may be enacted by the Legislature including laws to prevent pollution and ecological degradation.

### **5.2 Ports Authority Act, 1990**

Establishes the BVI Ports Authority and authorizes it to provide, operate, and maintain all port and harbour services and facilities in the Territory as the Minister considers necessary. Among its powers the BVIPA may:

- control the entry of vehicles, persons, goods and animals within the limits of any specified port and to regulate their movements within such limits;
- power to prohibit, control or regulate the use of the facilities or the presence of any person, ship, vehicle, or goods within any harbour or port.

### **5.3 Ports Authority Regulations, 1995**

The BVI Port Authority Regulations 1995 define Dangerous Goods and sets out their classification into 9 Classes and establishes the rules for the handling and transportation of dangerous goods within BVIPA facilities. Classes and classifications as follows:

Class	Dangerous Goods	Classification
Class 1	Explosives	Explosives
Class 2	Gases	Gasses, compressed, liquefied or dissolved under pressure
Class 3	Flammable liquid	Flammable liquids
Class 4.1	Flammable solids	Flammable solids
Class 4.2		Spontaneously combustible substance
Class 4.3		Substance which emits flammable gas in contact with water
Class 5.1	Oxidizers and organic peroxides	Oxidizing substances
Class 5.2		Organic peroxides
Class 6.1	Toxic and infectious substances	Toxic Substance
Class 6.2		Infectious substances
Class 7	Radioactive materials	Radioactive substance
Class 8	Corrosive substances	Corrosive substance
Class 9	Miscellaneous dangerous	Miscellaneous dangerous substances

### General duty

Any person who handles, carries or stores dangerous goods is obligated to pack, mark, label and stow the goods in accordance with

- Memorandum issued by the Ministry of Transport in the United Kingdom
- International Maritime Organisation Dangerous Goods Code

### Duties and obligations of Masters / Owners / Agents

Masters and/or Owners or Agents of Vessels are required to:

- give notice on Form 1 “on arrival at a harbour” having explosives or other goods of a dangerous or inflammable nature
- hoist signals on approach to the harbour and while the vessel remains in harbour
- give 24 hours notice to MD BVIPA before entering Territorial waters with dangerous goods cargo whether or not it is to be discharged
- give 24 hours notice to MD BVIPA before the shipment of any dangerous goods by vessel

- anchor or berth any vessel carrying dangerous goods in a position assigned by Managing Director (MD) and not move the vessel without written order or prior permission of the MD
- keep the vessel in a condition ready for removal (no immobilization of engines)
- ensure that adequate and competent crew shall remain on board the vessel during the time it remains in the harbour
- authorize a responsible person to remain on board whilst loading or discharging cargo for the purpose of supervising the loading or unloading
- remove any dangerous goods landed on the wharf before 1800hrs on the day the goods are so landed for arrival or shipment
- provide adequate safety and fire-fighting appliances on board the vessel for use when carrying, discharging or loading dangerous goods.
- afford the MD “every facility to ascertain whether any regulations under this Part are being contravened” (duty to allow inspection)
- exhibit a notice DANGER (with letters at least 6 inches) alongside the vessel where dangerous goods are being loaded or discharged
- adhere to any orders, rules, regulations under the Prevention of Oil Pollution Act of the United Kingdom
- handle petroleum carried aboard the vessel for fuel in accordance with stipulations;
- ensure no structural repairs of ships are made in harbour except with the written consent of the Managing Director

### **Prohibitions**

All persons are subject to prohibition

- to ship or unship dangerous goods without permit from MD BVIPA
- to enter or remain near the place of landing of dangerous goods without authorization from the MD

### **Powers of the BVIPA**

The Managing Director (MD) of BVIPA has the powers to

- issue permit only where the person has provided him with the particulars of dangerous goods
- direct Agent to remove dangerous goods from a wharf within a specified period of time, to dispose of the goods if the Agent does not comply, and to recover any expenses incurred from the Agent;
- authorize the persons who will handle dangerous goods when landed
- subject a vessel carrying dangerous goods to special control;
- waive or modify the requirement as to notice from a vessel carrying dangerous goods

### **Offences**

On contravention of any provision of the regulations a person may be liable upon summary conviction to a fine not exceeding \$5,000.

## **5.4 Merchant Shipping Act, 2001**

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The Merchant Shipping Act (MSA) addresses the regulation of dangerous goods aboard BVI flagged ships. It provides for

- Cabinet’s power to make regulations and incorporate by reference the IMDG Code including any amendments or replacements
- Prohibition against any person sending or carrying dangerous goods in a Virgin Islands Ship except in accordance with regulations made under s.258 MSA
- Duty of any person sending or carrying dangerous goods in a Virgin Islands Ship to
  - mark the package in accordance with the regulations
  - give notice of the nature of the goods and the name and address of the sender and recipient to the master of the ship
  - contravention of this is an offence on summary conviction to a fine not exceeding \$20,000
  - contravention of marking packing stowing or quantity shall be deemed unsafe by reason of improper loading
- Power of the Master to refuse any package s/he suspects to contain dangerous goods
- Power of the Master to throw overboard any dangerous goods sent on board without proper marking
- Power of the court to order forfeit of any dangerous goods carried in *any* ship in a manner that would be an offence under this part.

## **6 EXTENDED LEGISLATION**

### **6.1 Merchant Shipping Act 1894 (UK) [Sections 446 - 450](#)**

#### **General Duty / Prohibition**

No person is allowed to send or attempt to send by any vessel, British or foreign

- without distinctly marking their nature on the outside of the package; and
- giving written notice to the master or owner of the vessel at or before sending them to be shipped or taking them aboard the vessel

#### **Rights of Ship’s Master**

The master or owner of any vessel may

- refuse to take on board any package suspected to contain dangerous goods
- require any suspicious package to be opened
- throw the package/goods overboard where brought aboard the vessel without being marked or without notice,

#### **Offences and Penalties**

Failure to distinctly mark or give written notice of dangerous goods packages is an offence punishable on conviction to a fine not exceeding £100.

Sending dangerous goods under a false description is an offence punishable by a fine not exceeding £500.

## Power of the Court

Any court having Admiralty jurisdiction, with or without giving the owner notice, may declare dangerous goods forfeit and give directions for their disposal where the goods have been sent or it was attempted to send them on any vessel without being marked, without notice being given, or under a false description.

## 7 ADOPTED LEGISLATION

*For the purposes of the application of adopted legislation the BVI waters are considered to be UK waters.*

### 7.1 Merchant Shipping ([Gas Carriers](#)) Regulations 1994

Requires gas carriers to comply with the IGC Code - International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk published by the International Maritime Organisation

### 7.2 Merchant Shipping (Reporting Requirements for Ships Carrying Dangerous or Polluting Goods) Regulations 1995

These regulations set out the minimum requirements for vessels bound for or leaving UK and European Community ports and carrying dangerous or polluting goods. They do not apply to warships and other ships for the time being used by the government of any State for non-commercial purposes, and do not apply to bunkers stores and equipment for use on board a ship.

Where ships are carrying goods classified as dangerous or polluting in the IMDG Code the Coastguard Agency ([VISR](#)) must receive notification of all the information listed in Schedule 1 of Merchant Shipping Notice M 1630 prior to the ship departing from or arriving in a UK (BVI) port or anchorage.

The master is required to complete checklist in Schedule 2 of the MSN M 1630 prior to navigating in any port in the United Kingdom (BVI). Any pilot (or person designated by VISR) who does not receive such a checklist upon boarding the vessel has a duty to notify the port authority immediately, and the port authority has a duty to notify the Coastguard Agency ([VISR](#))

In the event of an incident at sea the master is required to notify the particulars in accordance with the [Guideline for Detailed Reporting Requirements](#) to the competent authority of the state affected.

### 7.3 Merchant Shipping (Dangerous Goods and Marine Pollutants) Regulations 1997

These regulations require compliance with the conditions specified in the IMDG Code in relation to the declaration, classification, marking, packaging, labelling, and placarding of dangerous goods or marine pollutants in bulk or packaged form along with prior notification to the competent authority or consignee as appropriate. The regulations also impose a duty of health and safety on the operators and employees of ships, prohibit the shipping of dangerous goods if IMDG conditions are not satisfied, and require all ships engaged on international voyages, passenger ships, and cargo ships of 500 gt to carry packaged goods to have a Cargo Securing Manual to the standard of IMO Maritime Safety Committee Circular MSC/Circ. 745 dated 13th June 1996 (Current [MSC/Circ 1353/Rev 1](#))

#### **7.4 Merchant Shipping (Carriage of Packaged Irradiated Nuclear Fuel etc) (INF Code) Regulations 2000**

Any BVI flagged ship and any ship transiting through BVI waters carrying nuclear cargo is required to hold a certificate of compliance with the INF Code.

### **8 Applicable Guidance**

MSN 1875: [Carriage of dangerous goods, packaged marine pollutants](#)

23 December 2016 Guidance

MGN 36 Carrying dangerous goods in packaged or dry bulk form

1 October 1997 Guidance

MGN 37 Merchant shipping regulations: dangerous goods and pollutants

1 October 1997 Guidance

MGN 282(M) Carriage of dangerous goods on offshore supply vessels

28 February 2005 Guidance

MGN 342 Carriage of dangerous goods for sale on UK ferries

30 May 2007 Guidance

MGN 497 Storage and use of dangerous goods onboard ship

28 August 2013 Guidance

MGN 545 Transportation of dangerous goods (marine)

4 April 2016 Guidance

MGN 531 (M) Cargo stowage and securing

11 February 2015 Guidance

MGN 534 (M+F) Cargo Safety: Verifying gross mass of containers

12 May 2016 Guidance

**APPENDIX 2: CLASSIFICATION PROCEDURE**

**Classification, Packing and Marking and Notifications Process**

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## 1 SUMMARY

This document defines in detail.

- the Classification, Packing and Marking process
- the Notification process.

## 2 REVISION AND APPROVAL

Rev.	Date	Nature of Changes	Approved By
[Rev Number]	[Date of Issue]	Original issue.	[Procedure Approver Name]

## 3 DEFINITION

The purpose of the Classification, Packing and Marking and Notification processes is to secure compliance with the Marking, Labelling and Documentation requirements of the International Maritime Dangerous Goods (IMDG) Code.

## 4 OBJECTIVES AND METRICS

To ensure all dangerous goods entering areas controlled by BVIPA are:

- durably marked with Hazard Placard(s), Correct technical name, United Nations number, MARINE POLLUTANT - where required, and Other marking – where required.
- recorded by Security in the **Dangerous Goods Logbook**.
- accompanied by the proper forms including declaration and certificate.
- properly notified to BVIPA prior to arrival at the port.

## 5 RESPONSIBLE PARTIES

**The following are responsible for:**

**Director of Operations /  
Operations Department**

- Receiving prior notification of the arrival of dangerous cargo at the port
- receiving, storing, loading or unloading, storing, or discharging dangerous cargo
- ensuring dangerous goods entering any harbour/berth by transportation by sea are properly marked and labelled.
- ensuring dangerous goods are accompanied by proper documentation

**Security Department**

- ensuring dangerous goods entering and exiting the port are properly marked and labelled.
- ensuring dangerous goods entering the port through transportation by land have the proper documentation.
- ensuring security of dangerous goods while transiting the port to prevent theft or misappropriation.

**Masters**

- Ensure cargo is labelled and marked in accordance with IMDG Code and regulations

## 6 TYPICAL PROCESS INPUTS

### 6.1 Technical information needed:

- IMDG Code (2 Copies - Security, Operations): From 1 January 2020 dangerous goods and marine pollutants in packaged form shall be shipped only in accordance with the IMDG Code 2018 Edition incorporating Amendment 39-18.
- Merchant Shipping (Vessel Traffic Monitoring and Reporting Requirements) Regulations 2004/2110

### 6.2 Resources needed:

- 

### 6.3 Personnel needed:

- 

### 6.4 Special training needed:

- Accept dangerous goods for transport.

- Handle dangerous goods.
- Prepare dangerous goods for loading/stowage.
- Load/unload dangerous goods from ships

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## 7 CLASSIFICATION, LABELS AND MARKS

### 7.1 Types of Dangerous Goods

Dangerous goods based on their origin and characteristics can be classified as follows:

**Oil by-products** – fire and explosion being their main risk (benzenes, liquefied petroleum gas and other fuels)

**Chemical products** – (Industrial, pharmaceutical and agricultural) manufactured and loaded either as final product for consumption or as by-products for industrial use. The latter are most of the dangerous goods transported, and if not properly handled, could cause great damage to people, transport units and the environment

**Minerals** – such as coal, sulfur, mineral concentrates and other metals or asbestos which can cause different illnesses, injuries, intoxication or fires

**Products of animal or vegetable origin** – as fishmeal, pressed cakes of oleaginous seeds and cotton, which can also cause spontaneous combustion, fire or explosions

**Radioactive materials** – used in a variety of industrial and medical processes, as well as for military applications, which, in high doses could cause immediate harm, or even in small doses could cause cancer and other illnesses if exposed to people for prolonged periods of time

Many of the substances from Class 1 to Class 9 are deemed **marine pollutants**. A marine pollutant is defined as “*any substance that will degrade the aquatic organisms that live in the water*”.

Prior to stowage, segregation, marking, labeling and storing dangerous goods safely, those handling dangerous goods must know exactly what hazards these dangerous goods pose to the user. The term ‘hazard’ in this text means a source or a situation with a potential harm with regard to People, Environment, Asset and Reputation (PEAR Concept).

All chemicals are subject to the code and are assigned to one of the classes 1 - 9 according to the hazard or the most predominant hazards they present.

### 7.2 Classification of Dangerous Goods

The consignor/shipper is responsible for selecting the appropriate classification. The IMDG Code classifies dangerous goods as follows (simplified form):

Class 1 — Explosives

1.1: Products with the potential to create a mass explosion

1.2: Products with the potential to create a projectile hazard

1.3: Products with the potential to create a fire or minor blast

1.4: Products with no significant risk of creating a blast

1.5: Products considered very insensitive that are used as blasting agents

1.6: Products considered extremely insensitive with no risk to create a mass explosion

Class 2 — Gases

2.1: Flammable gases

2.2: Nonflammable gases

2.3: Toxic gases

Class 3 — Flammable and combustible liquids

Class 4 — Flammable materials

4.1: Flammable solids

4.2: Spontaneously combustible

4.3: Dangerous when wet

Class 5 — Oxidizer and organic peroxide

5.1: Oxidizing substances

5.2: Organic peroxides

Class 6 — Poisons

6.1: Toxic substances

6.2: Infectious substances

Class 7 — Radioactive

Class 8 — Corrosive

Class 9 — Miscellaneous

The numerical order of the classes and divisions does not indicate the degree of danger.

### 7.3 **Layout and Size of Placards**

See IMDG Chapter 5.3 – Placarding and marking of cargo transport units

### 7.4 **Colors, words and graphics<sup>3</sup>**

One of the easiest ways to identify hazmat placards, other than the class numbers, is by the color (along with the words and graphics on each sign):

#### Orange

Orange represents explosive materials which can include products like dynamite, fireworks and ammunition. These signs typically have the words explosives or blasting agents on them and a graphic indicating something blowing up. They'll also have the number 1 to indicate the class.

#### Red

Red is for flammable goods like gasoline, rubbing alcohol, paint and acetone, which can fall into Classes 2 or 3. These placards feature a flame image and usually have the words flammable, gasoline, combustible or fuel oil.

#### Green

If the truck has a green sign, it's transporting nonflammable substances like compressed and liquefied gases. You'll see the word nonflammable gas, an image of a gas canister and the number 2.

<sup>3</sup> <https://arcb.com/blog/understanding-hazmat-placards>

### Yellow

Yellow indicates oxidizers — substances, that when mixed with oxygen, are likely to combust (Classes 2 or 5). Common oxidizers include ammonium nitrate, potassium nitrate, halogens and nitric acid. These signs have oxygen written on them and a graphic of an “O” with flames.

### White

White indicates poisonous and biohazardous substances like dyes, acids, aerosols and medical waste. For toxic materials, the sign will be labeled poison, PG III (PG = packing group) or inhalation hazard with a skull-and-crossbones image. For biohazards, the placard will say infectious substance and have a biohazard symbol (three circles overlapping one center circle). These types of materials can fall into Classes 2 or 6.

### Blue

Blue represents goods that are dangerous when wet — meaning when these materials meet water, they can become flammable. Examples include sodium, calcium and potassium. You’ll see dangerous when wet, an image of a flame and the number 4 on these placards.

### Red and white

If you see a sign that’s half red and half white with spontaneously combustible written on it, a flame graphic and the number 4, that means there are substances present that may ignite when exposed to air. This can include things like aluminum and lithium alkyls or white phosphorous.

### Red and white stripes

Signs that have red and white vertical stripes with the number 4 represent flammable solids such as matches and magnesium. These placards are labeled flammable solid and have a fire graphic.

### Red and yellow

Red and yellow indicate organic peroxides which have the potential to ignite or explode (these fall under the division 5.2). Common examples are methyl ethyl ketone peroxide and benzoyl peroxide. These signs say organic peroxide and will either have the graphic of “O” with flames or just a normal fire graphic.

### Yellow and white

Yellow and white represent radioactive substances that are often found in medical equipment. You’ll see the word radioactive, the radiation symbol of three blades surrounding a small circle, and the number 7.

### White and black

Half white and half black signifies corrosive materials that can irritate and harm the skin. Examples include batteries, hydrochloric acid, sulfuric acid and sodium hydroxide. These signs say corrosive, show substances spilling onto hands, and have the number 8.

White with black stripes

A white sign with black vertical stripes at the top and the number 9 at the bottom signals miscellaneous dangerous goods. This includes environmentally hazardous substances that don't fall into a specific class like asbestos and dry ice.

**7.5 UN Number and Proper Shipping Name**

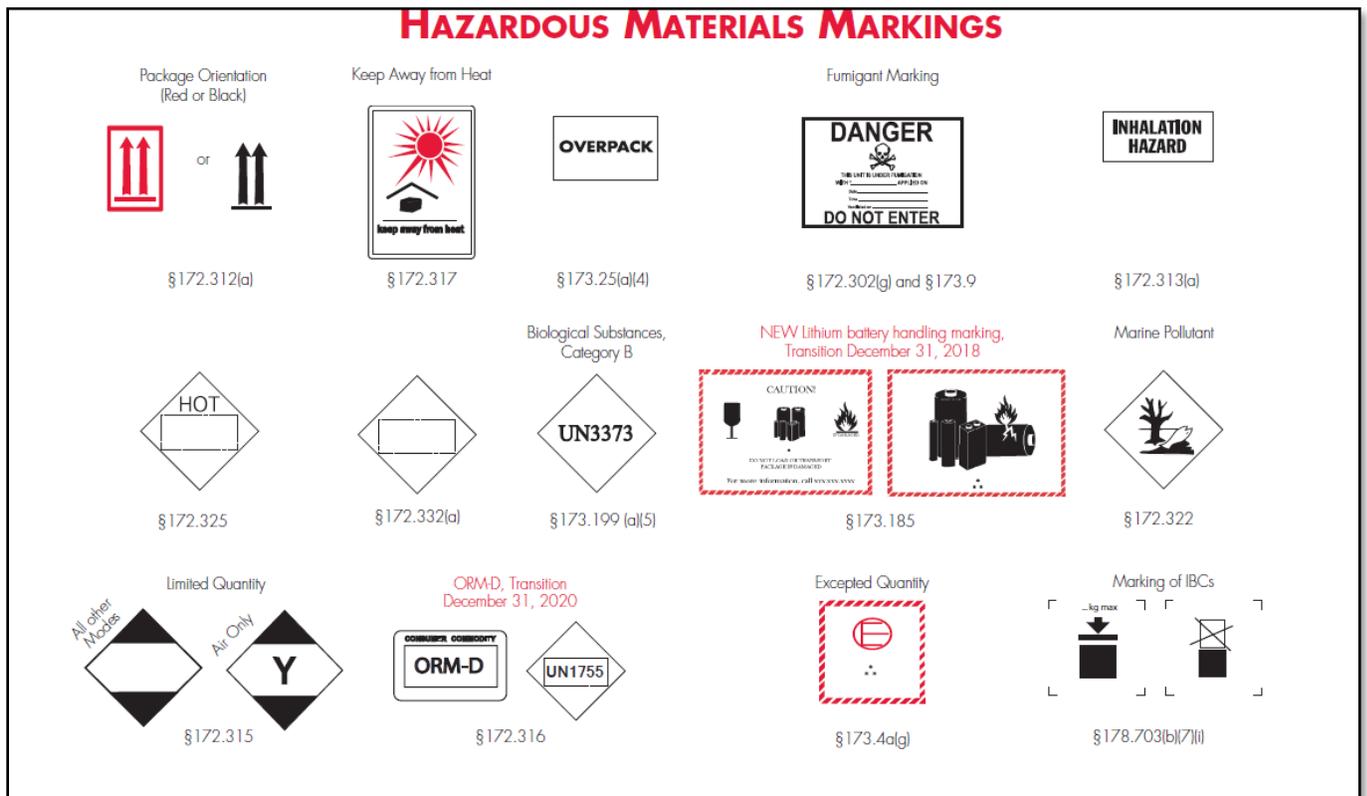
A 4-digit number and Proper Shipping name are assigned to each dangerous good by the United Nations based on the hazard classification and composition. See IMDG Chapter 2.

This number should be affixed to outside of the package of any dangerous cargo in excess of 400 kgs.

**7.6 Other Hazard Labels<sup>4</sup>**

Other hazardous labels should be affixed where required. Commonly used labels are package orientation and Marine Pollutant.

Figure 2: Other Hazardous Material Markings



<sup>4</sup> [https://www.faa.gov/hazmat/safecargo/how\\_to\\_ship/mailling\\_labeling/](https://www.faa.gov/hazmat/safecargo/how_to_ship/mailling_labeling/)

## 7.7 Marking of CTUs or Packages

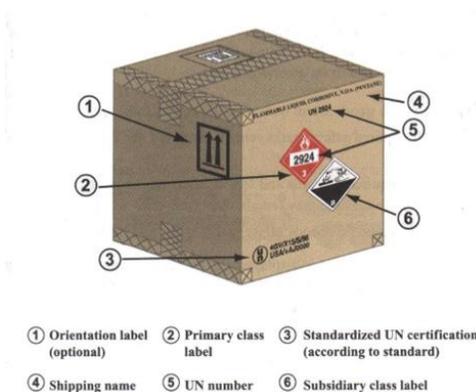
Cargo Transportation Units or Packages arriving or departing at the Port carrying dangerous goods should be marked as follows:

- Dangerous goods class label showcasing primary hazard
- Dangerous goods class label showcasing secondary or subsidiary hazards (as required)
- Proper shipping name
- UN Number
- Other hazardous materials marking (as required)

Figure 3: Example of Markings on CTU and Package



Example of Container transporting packaged dangerous goods of UN3082 loaded in excess of 4000 kg gross mass.<sup>5</sup>



Example of package marking.<sup>6</sup>

<sup>5</sup> <https://www.serpac.it/en/insights/practical-information/dangerous-goods/examples-of-imd-g-placarding-and-marking/>

<sup>6</sup> [https://www.chemsafetypro.com/Topics/TDG/Dangerous\\_Goods\\_Marking\\_Labeling.html](https://www.chemsafetypro.com/Topics/TDG/Dangerous_Goods_Marking_Labeling.html)

## 8 DOCUMENTATION

### 8.1 Declaration: See Chapter 1.1 Regulation 4

- Declaration by Shipper: that the consignment is properly packaged, marked, labelled or placarded

### 8.2 Certificate by Packer of CTU:

- **Stating that cargo in the unit has been properly packed and secured and marked**

### 8.3 Transportation Document

Information which must be included in the Dangerous Goods Transportation Document:

- The shipping name or correct technical name (no commercial names will be accepted)
- The United Nations number preceded by the letters UN
- The packing group when assigned
- The number and types of bundles, as well as the total quantity of dangerous goods per volume or mass
- The subsidiary risks not indicated in the shipping name
- When applicable, the goods shall be identified as “Marine Pollutant”
- Empty means of containment, which contain the residue of dangerous goods shall be described as such, for example, by placing the words “Empty”, “Uncleaned” or “Residue Last Contained” before or after the proper shipping name
- For dangerous goods in limited quantities, the phrase “Dangerous Goods in Limited Quantity” shall be included
- For class 5.2 or self-reactive substances of class 4.1, the regulation and emergency temperatures
- A statement signed in the name of the consignor, saying that the goods are correctly described, classified, packed, marked and labeled and that its conditions are appropriate for transport

Dangerous cargo secured incorrectly inside containers, which then becomes loose and damaged during transport, has been the cause of the majority of accidents concerning dangerous goods. This is why it is very important to check that this has been carried out correctly.

Additional information may also be required in certain cases for explosives, radioactive materials, dangerous goods transported in a molten state, etc.

#### 8.4 Order of Information on Declaration

If dangerous substances and other non dangerous substances are listed in the same document, the dangerous substances should be listed first or their dangerous nature should be emphasized. Regardless of the format of this declaration, always the same information must be provided.

The following order of information must be respected, without inserting any other data in between:

Proper shipping name, Class, UN number, Packing group (when applicable)

The following are examples of dangerous goods descriptions:

ALLYL ALCOHOL,	6.1,	UN	1098 I
FORMIC ACID,	8,	UN	1779, II
ACROLEIN STABILIZED,	6.1,	UN	1902, G e/e I (3), MARINE POLLUTANT

#### 8.5 Multimodal Model of Transport Document

There is no mandatory model for the dangerous goods declaration.

The IMDG Code recommends the use of the **Multimodal Dangerous Goods Form** (see Fig. 4), which includes the dangerous goods declaration and the vehicle/container packing certificate (Regulation 4, Chapter VII, Solas 74).



Figure 5: **MULTIMODAL DANGEROUS GOODS FORM**

This form may be used as a dangerous goods declaration as it meets the requirements of SOLAS, chapter VII, regulation 4; MARPOL, Annex III, Regulation 4.

1 Shipper/Consignor/Sender

2 Transport document number

3 Page No of

4 Shipper's reference

5 Freight Forwarder's Reference

6 Consignee

7 Carrier (to be completed by the carrier)

**SHIPPER'S DECLARATION**

I hereby declare that the contents of this consignment are fully and accurately described below by the Proper Shipping Name, and are classified, packaged, marked and labelled/placarded and are in all respects in proper condition for transport according to the applicable international and national governmental regulations.

8 This shipment is within the limitations prescribed for:-

(Delete non Applicable)

Passenger and Cargo Aircraft

Cargo Aircraft Only

10 Vessel

11 Port/Place of loading

12 Port/Place of discharge

13 Destination

14 Shipping Marks

\*Number and kind of packages: description of goods

Gross mass (kg)

Net mass (kg)

Cube (m<sup>3</sup>)

15 Container identification number / vehicle registration no.

16. Seal number(s)

17 Container / Vehicle size & type

18 Tare mass (kg)

19 Total gross mass (including tare) (kg)

**CONTAINER/VEHICLE PACKING CERTIFICATE**

I hereby declare that the goods described above have been packed/loaded into the container/vehicle identified above in accordance with the applicable provisions \*\*

**MUST BE COMPLETED AND SIGNED FOR ALL CONTAINER / VEHICLE LOADS BY PERSON RESPONSIBLE FOR PACKING / LOADING**

**21 RECEIVING ORGANISATION RECEIPT**

Received the above number of packages/containers/trailers in apparent good order and condition, unless stated hereon:

RECEIVING ORGANISATION REMARKS:

20 Name of Company

Haulier's Name

22 Name of company (OF SHIPPER PREPARING THIS NOTE)

Vehicle Registration No.

Name/status of declarant

Name/status of declarant

Signature and date

Place and Date

Place and date

Signature of declarant

DRIVER'S SIGNATURE

Signature of Declarant

**\* DANGEROUS GOODS**

You must specify: UN No., Proper Shipping name, hazard class, packing group, (where assigned), marine pollutant and observe the mandatory requirements under applicable national and international governmental regulations. For the purposes of the IMDG Code see 5.4.1.4

\*\* For the purposes of the IMDG Code see 5.4.2.

This form is reproduced from IMDG code (amendment 37-14), Chapter 5.4 – Documentation, Page 275

Figure 6: Example of completed Document

MULTIMODAL DANGEROUS GOOD FORM					
1. Shipper/Consignor/ Sender Very Toxic Chemical Company 55 Prosperous Ave, Singapore 123456 Tel : 777-4444		2. Transport document number			
3. Page 1 of 1 pages		4. Shipper's reference			
5. Freight forwarder's reference					
6. Consignee Safe Chemical Trading Co., Ltd 45th Street, Northumberland NE24 4RG United Kingdom Tel : 444-8446		7. Carrier (to be completed by the carrier)			
SHIPPER'S DECLARATION (signature in block section 22 below) I hereby declare that the contents of this consignment are fully and accurately described below by the Proper Shipping Name, and are classified, packaged, marked and labeled/placard marked and labeled/placard and are in all respects in proper condition for transport according to transport according to the applicable international and national governmental regulations					
8. This shipment is within the limitations prescribed for: (delete non-applicable) PASSENGER AND CARGO AIRCRAFT		CARGO AIRCRAFT ONLY			
10. Vessel/flight No. and date M.V. Green Voy. 123N		11. Port/place or loading Singapore			
12. Port/Place of discharge Liverpool/ United Kingdom		13. Destination Manchester/UK			
9. Additional handling information					
14. Shipping marks					
MOOV Head Lice Solution 200 ml		UN 1170, ETHANOL SOLUTION, Class 3, PG III, (24°C c.c.) LTD QTY F-E, S-D. Total: 3 Ctns (24/Ctn) In plastic Bottles : QTY : 72	Gross mass(kg) 20.25	Nett mass(kg) 14.04	Cube(m <sup>3</sup> ) 0.057
Resolve Solution 25 ml		UN 1170, ETHANOL SOLUTION, Class 3, PG II, (20°C c.c.) LTD QTY F-E, S-D. Total: 1 Ctn (14/Ctn) In plastic Bottles : QTY : 14	0.544	0.31	0.001
15. Container identification No/ vehicle registration No. SPDU1234567					
16. Seal number(s) 5445974		17. Container/ vehicle size & type 40' GP	18. Tare mass (kg) 19,678	19. Total gross mass (including tare) (kg) 25,000	
20. CONTAINER/ VEHICLE PACKAGING CERTIFICATE I hereby declare that the goods described above have been packaged/ loaded into the container/ vehicle identified above in accordance with the applicable provisions MUST BE COMPLETED AND SIGNED FOR ALL CONTAINER/VEHICLE LOADS BY PERSON RESPONSIBLE FOR PACKING/LOADING		21. RECEIVING ORGANIZATION RECEIPT Received the above number of packages/ container/ trailers in apparent good order and condition, unless stated hereon: RECEIVING ORGANIZATION REMARKS.			
Name of company Very Toxic Chemical Company, 55 Prosperous Ave, Singapore 123456 Tel : 777-4444		Hauler's name	22. Name of company (of SHIPPER PREPARING THIS NOTE) Very Toxic Chemical Company		
Name/status of declarant Mr. Pack Packman		Vehicle reg. No.	Name/status of declarant Mr. Abod Elghi /Export Asst.		
Place and date Singapore, 15 June 2011		Signature and date	Place and date Singapore, 15 June 2011		
Signature of declarant		Driver's Signature	Signature of declarant		
DANGEROUS GOODS * You must specify: Proper Shipping Name, hazard class, UN No. packing group, (where assigned) marine pollutant and observe the marking requirements under applicable national and international governmental regulation. For the purpose of the IMDG Code see, 5.4.1.4 For the purpose of the IMDG Code: See 5.4.2					

Note that Form 1 of the BVIPA Regulations needs to be updated immediately, or used in conjunction with the required forms.

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**FIRST SCHEDULE**

**BRITISH VIRGIN ISLANDS PORTS AUTHORITY ACT NO. 12 OF 1990**

**FORM 1**

[Regulation 8]

Reports of Dangerous Goods to be Landed or Shipped

To the Managing Director of the British Virgin Islands Ports Authority

I hereby give notice that the following goods are

(a) on board Motor Vessel .....

and are required to be discharged:

.....  
.....  
.....  
.....

(b) require to be shipped by Motor Vessel

.....  
.....  
.....

(c) on board Motor Vessel .....  
In transit and are specially stowed:

.....  
.....  
.....

.....  
**Master**

## 9 NOTIFICATION BY SHIPS CARRYING DANGEROUS OR POLLUTING GOODS

All ships with the exception of warships, naval auxiliaries and other ships owned or operated by the Government of the UK / BVI, or an EEA State which are used for non-commercial public services are required to give notification to the BVI Port Authority prior to arriving or departing a BVI harbour.<sup>7</sup>

The BVI Ports Authority must receive notification from the owner, master or agent of a ship leaving a BVI port bound for any other port at minimum 2 hr prior to departure, or at latest upon departure.

The BVI Ports Authority must receive notification of intention to arrive at a BVI port 24 hr in advance of arrival, or at latest upon departure from the previous port.

The notification should contain the information set out in Part. C of Annex B of MSN1899 (M+F)<sup>8</sup> (see page 23 of this document).

### Transportation by Sea

The Agent or Master or Operator of the vessel shall notify BVIPA 24 hr in advance of arrival of any dangerous goods on board the vessel by copy of the Dangerous Goods Multimodal Form or other manifest containing the information required by the IMDG Code attached to the Berthing Application and emailed to: [operations@bviports.org](mailto:operations@bviports.org)

*The Agent or Master or Operator of the vessel shall notify BVIPA of any dangerous goods to be landed or discharged from the vessel by use of the Berthing Application*

### Transportation by Land

The Shipper shall notify the BVIPA 24 hrs in advance of any expected delivery of dangerous goods to the port for shipment by copy of the Multimodal Form or other manifest containing the information required by the IMDG Code attached to the Berthing Application emailed to: [operations@bviports.org](mailto:operations@bviports.org)

The notification should contain the information set out in Part C. of Annex B of MSN1899 (M+F)<sup>9</sup> (see page 24 of this document).

## 10 RECORD OF DANGEROUS GOODS ENTERING AND EXITING THE FACILITY

The UN Number and IMDG Dangerous Good Category shown on any visible placard shall be recorded by the **Operations Officer** in the Marks and Numbers column of the Gate Pass Delivery Note (Fig. 6).

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<sup>7</sup> The Merchant Shipping (Vessel Traffic Monitoring and Reporting Requirements) Regulations 2004; BVIPA Regulations 1995

<sup>8</sup> [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/858748/MSN\\_1899\\_M+F\\_Vessel\\_Traffic\\_Monitoring\\_Notification\\_and\\_Reporting\\_Requirements\\_for\\_Ships\\_and\\_Ports.1.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/858748/MSN_1899_M+F_Vessel_Traffic_Monitoring_Notification_and_Reporting_Requirements_for_Ships_and_Ports.1.pdf)

<sup>9</sup> [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/858748/MSN\\_1899\\_M+F\\_Vessel\\_Traffic\\_Monitoring\\_Notification\\_and\\_Reporting\\_Requirements\\_for\\_Ships\\_and\\_Ports.1.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/858748/MSN_1899_M+F_Vessel_Traffic_Monitoring_Notification_and_Reporting_Requirements_for_Ships_and_Ports.1.pdf)

Figure 7: BVIPA Gate Pass Delivery Note



**BRITISH VIRGIN ISLANDS PORTS AUTHORITY  
GATE PASS DELIVERY NOTE**



GWH: 1

SHED/	SHIP:				DELIVERY DETAILS
OPEN STORAGE	ROT'N	T-12 NUMBER	Date of Report		Ex-Ship
VEHICLE NO.			Time Commenced		Ex-Shed
DRIVER'S NAME			Time Completed		Ex-Open Store
IMPORTER/AGENT					Palletised
B/L Number	Marks & Numbers	Quantity & Description of Packages & Contents Delivered		Balance Not Yet Delivered	Crane Used
					Flt. Used
					Manual
					Part Delivery
					Final Delivery
					Remarks including reason for part delivery
TOTAL NUMBER OF PACKAGES IN WORDS				Certified Correct Sign. Of Delivery Clerk .....	
				Date:                      Time:	
				Received the above particulars Sign. Of Importer/Agent .....	
				Date:                      Time:	
				Certified Correct                      Sign. Of Security Staff .....	
THIS PASS MUST BE HANDED IN AT THE GATE. VALID FOR DAY OF USE ONLY.				Date:                      Time:	

**11 TYPICAL OUTPUTS**

The typical results (outputs) of the process are as follows:

**11.1 Product produced:**

- Safe transfer of dangerous goods through controlled port areas

**11.2 Documents or technical information produced:**

- Vessel traffic information for Reporting

**11.3 Records produced:**

- Dangerous Goods Log Book (Compilation of Gate Pass Delivery Notes)
- Multimodal Dangerous Goods Transportation Forms

**11.4 Services produced:**

## Appendix 1: Placards

### Class 1: Explosives



#### **Subclass 1.1: Explosives with a mass explosion hazard**

Consists of explosives that have a mass explosion hazard. A mass explosion is one which affects almost the entire load instantaneously.



#### **Subclass 1.2: Explosives with a severe projection hazard**

Consists of explosives that have a projection hazard but not a mass explosion hazard.



#### **Subclass 1.3: Explosives with a fire**

Consists of explosives that have a fire hazard and either a minor blast hazard or a minor projection hazard or both but not a mass explosion hazard.



#### **Subclass 1.4: Minor fire or projection hazard**

Consists of explosives that present a minor explosion hazard. The explosive effects are largely confined to the package and no projection of fragments of appreciable size or range is to be expected. An external fire must not cause virtually instantaneous explosion of almost the entire contents of the package.



#### **Subclass 1.5: An insensitive substance with a mass explosion hazard**

Consists of very insensitive explosives with a mass explosion hazard (explosion similar to 1.1). This division is comprised of substances which have a mass explosion hazard but are so insensitive that there is very little probability of initiation or of transition from burning to detonation under normal conditions of transport.



#### Subclass 1.6: Extremely insensitive articles

Consists of extremely insensitive articles which do not have a mass explosive hazard. This division is comprised of articles which contain only extremely insensitive detonating substances and which demonstrate a negligible probability of accidental initiation or propagation.

### Class 2 :Gases



#### Subclass 2.1: Flammable Gas

Gases which ignite on contact with an ignition source, such as acetylene and hydrogen. Flammable gas means any material which is ignitable at 101.3 kPa (14.7 psi) when in a mixture of 13 percent or less by volume with air, or has a flammable range at 101.3 kPa (14.7 psi) with air of at least 12 percent regardless of the lower limit.



#### Subclass 2.2: Non-Flammable Gases

Gases which are neither flammable nor poisonous. Includes the cryogenic gases/liquids (temperatures of below -100°C) used for cryopreservation and rocket fuels. This division includes compressed gas, liquefied gas, pressurized cryogenic gas, compressed gas in solution, asphyxiant gas and oxidizing gas. A non-flammable, nonpoisonous compressed gas means any material which exerts in the packaging an absolute pressure of 280 kPa (40.6 psia) or greater at 20°C (68°F), and does not meet the definition of Division 2.1 or 2.3.



#### Subclass 2.3: Poisonous Gases

Gases liable to cause death or serious injury to human health if inhaled. Gas poisonous by inhalation means a material which is a gas at 20°C or less and a pressure of 101.3 kPa (a material which has a boiling point of 20°C or less at 101.3kPa (14.7 psi)) which is known to be so toxic to humans as to pose a hazard to health during transportation, or in the absence of adequate data on human toxicity, is presumed to be toxic to humans because when tested on laboratory animals it has an LC50 value of not more than 5000 ml/m<sup>3</sup>.

### Class 3:Flammable Liquids



A flammable liquid means a liquid which may catch fire easily or any mixture having one or more components with any flash point. As example: acetone, diesel, gasoline, kerosene, oil etc. Transportation is strongly recommended at or above its flash point in a bulk packaging. There are three main groups of flammable liquid.

1. Low flash point - liquids with flash point below -18°C
2. Intermediate flash point - liquids with flash point from -18°C. up to +23°C
3. High flash point group - liquids with flash point from +23°C

## Class 4: Flammable solids or substances



### Subclass 4.1: Flammable solids

For the purpose of this Code, flammable solids means readily combustible solids and solids which may cause fire through friction.



### Subclass 4.1: Self-reactive substances

Self-reactive substances are thermally unstable substances liable to undergo a strongly exothermic decomposition even without participation of oxygen (air).



### Subclass 4.1: Solid desensitized explosives

Solid desensitized explosives are explosive substances which are wetted with water or alcohols or are diluted with other substances to form a homogeneous solid mixture to suppress their explosive properties.



### Subclass 4.1: Polymerizing substances and mixtures (stabilized)

Polymerizing substances are substances which, without stabilization, are liable to undergo a strongly exothermic reaction resulting in the formation of larger molecules or resulting in the formation of polymers under conditions normally encountered in transport. Explosives included under class 1 however deactivated or substances specially included under this class by the producer.



### Subclass 4.2: Substances liable to spontaneous combustion



#### **Subclass 4.2: Comprises**

1 Pyrophoric substances, which are substances, including mixtures and solutions (liquid or solid), which, even in small quantities, ignite within 5 minutes of coming into contact with air. These substances are the most liable to spontaneous combustion; and 2 Self-heating substances, which are substances, other than pyrophoric substances, which, in contact with air without energy supply, are liable to self-heating. These substances will ignite only when in large amounts (kilograms) and after long periods of time (hours or days).



#### **Subclass 4.3: Substances which, in contact with water, emit flammable gases**

For the purpose of this Code, the substances in this class are either liquids or solids which, by interaction with water, are liable to become spontaneously flammable or to give off flammable gases in dangerous quantities.

### **Class 5: Oxidizing substances and organic peroxides**



#### **Subclass 5.1: Oxidizing substances**

Substances which, while in themselves not necessarily combustible, may, generally by yielding oxygen, cause, or contribute to, the combustion of other material. Such substances may be contained in an article.



#### **Subclass 5.2: Organic peroxides**

Organic substances which contain the bivalent  $-O-O-$  structure and may be considered derivatives of hydrogen peroxide, where one or both of the hydrogen atoms have been replaced by organic radicals. Organic peroxides are thermally unstable substances which may undergo exothermic self-accelerating decomposition.



#### **Subclass 6.1: Toxic substances**

Toxic substances which are able to cause death or serious hazard to humans health during transportation.



#### Subclass 6.2: Infectious substances

These are substances known or reasonably expected to contain pathogens. Pathogens are defined as microorganisms (including bacteria, viruses, rickettsiae, parasites, fungi) and other agents such as prions, which can cause disease in humans or animals.

#### Class 7: Radioactive material



Radioactive material means any material containing radionuclides where both the activity concentration and the total activity in the consignment exceed the values specified in 2.7.2.2.1 to 2.7.2.2.6.

#### Class 8: Corrosive substances



Class 8 substances (corrosive substances) means substances which, by chemical action, will cause severe damage when in contact with living tissue or, in the case of leakage, will materially damage, or even destroy, other goods or the means of transport.

#### Class 9: Miscellaneous dangerous substances and articles and environmentally hazardous substances



substances and articles (miscellaneous dangerous substances and articles) are substances and articles which, during transport, present a danger not covered by other classes.

- ☑ Substances which, by inhalation as fine dust, may endanger health
  - ☑ Substances evolving flammable vapour
  - ☑ Lithium batteries
  - ☑ Life-saving appliances
  - ☑ Capacitors
  - ☑ Substances and articles which, in the event of fire, may form dioxins
  - ☑ Substances transported or offered for transport at elevated temperatures
  - ☑ Environmentally hazardous substances
  - ☑ Genetically modified microorganisms (GMMOs) and genetically modified organisms (GMOs)
- Other substances or articles presenting a danger during transport, but not meeting the definitions of another class.

## Appendix 2

### Annex B

#### **Information to be notified in accordance with Regulation 10 (Notification by ships, regardless of size, carrying dangerous or polluting goods)**

A. General information:

- (a) ship identification (name, call sign, IMO identification number or MMSI number);
- (b) port of destination;
- (c) for a ship leaving a port in a Member State: estimated time of departure from the port of departure or pilot station, as required by the competent authority, and estimated time of arrival at the port of destination;
- (d) for a ship coming from a port located outside the Community and bound for a port in a Member State: estimated time of arrival at the port of destination or pilot station, as required by the competent authority;
- (e) total number of persons on board.

B. Cargo information:

- (a) the correct technical names of the dangerous or polluting goods, the United Nations (UN) numbers where they exist, the IMO hazard classes in accordance with the IMDG, IBC and IGC Codes and, where appropriate, the class of the ship as defined by the INF Code, the quantities of such goods and their location on board and, if they are being carried in cargo transport units other than tanks, the identification number thereof;
- (b) confirmation that a list or manifest or appropriate loading plan giving details of the dangerous or polluting goods carried and of their location on the ship is on board;
- (c) address from which detailed information on the cargo may be obtained.

Please note that the cargo information (Section B) should be provided in a consolidated document(s), inclusive of the address (c) and a declaration that the manifest is onboard (b).

**Declaration to be delivered by the Shipper in accordance with Regulation 10 of the  
Merchant Shipping (Dangerous Goods and Marine Pollutants) Regulations 1997,  
(S.I.1997/2367) as amended**

C. Requirements concerning the transport of dangerous goods:

- (a) the correct technical names of the dangerous or polluting goods, the United Nations (UN) numbers where they exist, the IMO hazard classes in accordance with the IMDG, IBC and IGC Codes and, where appropriate, the class of the ship as defined by the INF Code, the quantities of such goods and their location on board and, if they are being carried in cargo transport units other than tanks, the identification number thereof;
- (b) for the substances referred to in Annex I to the MARPOL Convention, the safety data sheet detailing the physico-chemical characteristics of the products, including, where applicable, their viscosity expressed in cSt at 50 °C and their density at 15 °C and the other data contained in the safety data sheet in accordance with IMO Resolution MSC.286(86);
- (c) address from which detailed information on the cargo may be obtained as well as emergency numbers of the shipper or any other person or body in possession of information on the physicochemical characteristics of the products and on the action to be taken in an emergency.

**APPENDIX 3 – MARINE ACCIDENT REPORT FORM**