

# Packaged Dangerous Goods Management Guideline

June 2011



Port of Melbourne  
Corporation



**Disclaimer**

This document contains information intended as a guide for the requirements and recommendations for the safe handling and storage of Packaged Dangerous Goods in the Port of Melbourne by ship owners and Masters (or their agents), berth operators, stevedores, leaseholders and their employees, representatives and contractors. It incorporates minimum statutory requirements and industry standards that apply, or may apply, at the port.

Please note that compliance with statutory requirements and industry standards is the independent responsibility of any person accessing or undertaking any activity at the port (whether on port land or port waters). Therefore, readers must independently verify that the information contained within is accurate, complete and up to date.

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Information contained in this document is current at the time of print. Please note that changes may occur without notice.

## Revision history

Date	Version	Reason
3/7/2011	3.8	Updated Legislative Reference & Note on DG Hub Notification system.

## Approval

Date of current issue	Name and title

Document Location:

The most up-to-date document and central source for referenced forms and additional guidelines can be located on the Port of Melbourne website at <http://www.portofmelbourne.com>

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## Forward

This document sets out the requirements and recommendations for the safe handling and storage of Packaged Dangerous Goods in the Port of Melbourne. Its purpose is to assist ship owners and Masters (or their agents), berth operators, stevedores and leaseholders to provide the minimum acceptable safety requirements for facilities and operating procedures when handling such Goods so as to ensure the protection of people, property and the environment. These activities must be carried out in compliance with the following:

- Australian Dangerous Goods Code (ADG) 7th edition
- Occupational Health and Safety Act 2004
- Occupational Health and Safety Regulations 2007
- Road Transport (Dangerous Goods) Act 1995
- Dangerous Goods Act 1985
- Dangerous Goods (Storage and Handling) Regulations 2000
- Dangerous Goods (Explosives) Regulations 2000
- Dangerous Goods (Explosives) Regulations 2011
- International Maritime Dangerous Goods Code 2008
- Australian Standard 3846-2005 The handling and transport of dangerous cargoes in port areas
- IAEA Regulations for the Safe Transport of Radioactive Material
- AS/NZS ISO 31000:2009 Risk management – Principles and guidelines.

The Dangerous Goods Regulations (2000) through its attached codes of practice allow the use of specific guidelines and standards to achieve the requirements of the regulations. As such, for practical and operational purposes, Port of Melbourne Corporation (PoMC) requires that any ship, berth operator, company or individual, who is involved in the handling, transport and storage of Packaged Dangerous Goods complies with the requirements of AS 3846 2005.

Where the requirements of AS 3846 are in conflict with Federal or State Dangerous Goods Acts and Regulations, the Acts and Regulations shall apply.

The PoMC, tenants, berth operators, stevedores, ship owners, ship masters and shipping agents all share responsibility for safety in the port and have a responsibility to port users and the local community to ensure that operational activities in the port are conducted in a safe, secure and environmentally sustainable manner.

Key critical factors in place when handling Packaged Dangerous Goods:

- Legislative notification requirements are met
- Compliant separation and storage requirements exist at all times
- Safe infrastructure and work systems are in place
- Trained staff undertake the operation
- A risk assessment covering all facets of the transfer operation is current
- Monitoring programs for safe and effective progression of the transfer operation are evident

- A coordinated reporting and investigation system is active
- Planned emergency, incident and recovery management processes are tested
- Emergency equipment and pollution response systems are in place.

Note there have been updates to this guideline in line with recent changes to the Dangerous Goods Legislation (See Section 8) and PoMC notification system (See Section 6).

## **1 Preliminary**

### **1.1 Purpose**

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The purpose of this “Packaged Dangerous Goods Management Guideline” is to provide practical guidance or advice on the safe and effective handling, transport and storage of Packaged Dangerous Goods in the Port of Melbourne.

- This guideline will assist tenants, berth operators, stevedores, ship owners, ship masters and shipping agents in complying with current National and State Health & Safety Legislation and Regulations. It recommends work practices that can be used to reduce the risk of work related injury, damage to property and the environment.
- A risk assessment process should be adopted when handling Packaged Dangerous Goods. The assessment may identify other specific recommendations not covered by this guideline. In such circumstances, additional risk control measures must be considered.

### **1.2 Scope and Application**

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This guideline covers:

- Dangerous goods, hazardous substances, harmful materials and articles including environmentally hazardous substances (marine pollutants) and wastes, covered by the International Maritime Dangerous Goods Code (IMDG Code).

### **1.3 Requirements**

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PoMC requires that any ship, berth operator, company or individual, who is involved in the handling, transport and storage of Packaged Dangerous Goods and articles containing dangerous goods complies with the requirements of Legislation and Australian Standard 3846.

Certain sections AS 3846 may refer to other State, National and International codes and regulations for further guidance. Where the requirements of AS 3846 are in conflict with Federal or State Dangerous Goods Acts and Regulations, the Acts and Regulations shall apply.

### **1.4 Marking and packaging:**

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All dangerous cargoes delivered to or from the port area shall be packaged, marked, labelled, and placarded in accordance with the International Maritime Dangerous Goods Code (IMDG) code. Documentation shall comply with the Australian Dangerous Goods (ADG) Code.

## 1.5 Definitions

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**ADG Code** - Australian Dangerous Goods Code.

**Agent** - A person or organisation responsible for the administrative details of a ship's visit to the port.

**AMSA** - Australian Maritime Safety Authority (Commonwealth).

**AQIS** - Australian Quarantine Inspection Service (Commonwealth).

**AS3846** - Australian Standard 3846-2005: The handling and transport of dangerous cargoes in port areas.

**Berth** - Any dock, pier, jetty, quay, wharf, marine terminal or similar structure (whether floating or not) at which a ship may tie up. It includes any plant or premises, other than a ship, used for purposes ancillary or incidental to the loading or unloading of dangerous cargoes.

**Correct technical name** - Has the meaning given in the International Maritime Organisation (IMO) International Maritime Dangerous Goods Code (IMDG Code) and is synonymous with 'proper shipping name'.

- **Dangerous Goods** -

Substances or articles that –

- a Satisfy the UN tests and criteria for determining whether they are dangerous goods; or
- b Are listed in the IMDG Code; or
- c Are determined to be dangerous goods by the competent authority.

NOTE: UN tests and criteria are given in the *UN Manual of Tests and Criteria* and the *UN Recommendations on the Transport of Dangerous Goods – Model Regulations*.

In assessing the hazard posed by the goods referred to above, the volatility, toxicity and pollution category of the goods need to be considered.

The term 'dangerous goods' includes any empty, uncleaned packagings (such as tank containers, receptacles, intermediate bulk containers (IBC's), bulk packagings, portable tanks or tank vehicles) that previously contained dangerous goods, unless the packagings have been sufficiently cleaned of residue of the dangerous goods and purged of vapours so as to nullify any hazard, or have been filled with a non-dangerous substance.

**Department of Health (Department of Human Services)** - The regulator for Dangerous Goods of Class 7 Radioactive.

**EPA** - Environment Protection Authority (Victoria).

**Handling** - The operation of loading or unloading of a ship; transfer to, from, or within a terminal area or ship; or trans shipment between ships or other modes of transport. This includes intermediate keeping i.e. The temporary storage of Packaged Dangerous Goods in the port area during their transport from the point of origin to their destination for the purpose of changing the modes or means of transport.

*Note: This is an important term, which relates to the actual operations, which take place. It has been widely drawn so as to cover all of the many operations, which relate to Packaged Dangerous Goods in a port area.*

**Hazard** - Means any thing, activity, occurrence or circumstance of any kind that has the potential to cause injury to persons, to damage property or pollute the environment by:

- An explosion, fire, harmful reaction or the evolution of flammable, corrosive or toxic vapours involving dangerous goods; or
- The escape, spillage or leakage of any dangerous goods.

**IMDG Code** - The International Maritime Dangerous Goods Code 2008, published by the International Maritime Organization (currently edition.

**IAEA Regulations** - IAEA Regulations for the Safe Transport of Radioactive Material (TS-R-1).

**Low Specific Activity (LSA) material** – Radioactive material which by its nature has a limited specific activity, or radioactive material for which limits of estimated activity apply.

- a LSA-I;
- b LSA-II; and
- c LSA-III.

These groups are further defined and explained in the UN *Recommendations for the transport of Dangerous Goods – Model Regulations*.

**Melbourne VTS** - Central communications centre for all shipping movements and emergency notifications. The contact points are:

- General: (03) 9644 9700
- Emergency: (03) 9644 9777 or VHF radio Channel 12.

**Port of Melbourne Corporation (PoMC)** - Is a responsible body for managing the port and to provide that Port operations are conducted in a safe and environmentally sustainable manner.

**Packaging Group** – One of the three hazard groups to which dangerous goods (excluding Classes 1, 2, 6.2 and 7) are assigned in the *IMDG Code*, in decreasing order of hazard, by the Roman numerals 'I' (high danger), 'II' (medium danger) and 'III' (low danger).

**Note:** The UN *Recommendations on the Transport of Dangerous Goods – Model Regulations* provide criteria for the assessment of packing groups. Lists of those already assigned are given in the *ADG Code* and *IMDG Code*.

**Proper shipping name** - The name used to describe a dangerous good, as defined in the IMDG Code.

**PoMC Health & Safety** - The group responsible for monitoring and auditing the handling of Packaged Dangerous Goods within the Port of Melbourne.

**Port Safety Officer** - A representative of PoMC tasked with the responsibility to ensure compliance with port procedures.

**Risk** - Means the likelihood of injury to persons, damage to property or pollution of the environment being caused by the hazard.

**Responsible Person** - A person appointed by an employer or the Master of the ship and empowered to take all decisions relating to a specific task, having the necessary knowledge and experience for that purpose.

**Regulatory Authority** – Victorian Worksafe and Department of Health Services (class 7 only) are the regulatory authorities that determine the conditions under which Packaged Dangerous Goods are handled and/or kept in operational areas within the Port of Melbourne.

**Reasonably Practicable** - To determine what is practicable, the factors that should be considered are:

- the severity of the hazard or risk
- the likelihood of serious injury or damage
- the state of knowledge about the hazard or risk
- information you know about the hazard or risk
- information provided to you about the hazard or risk
- ways to remove or mitigate the risk
- the availability and suitability of risk controls
- the cost of removing or mitigating the risk.

**Worksafe** - The Victorian Workcover Authority's Worksafe Division, the regulator for Dangerous Goods other than Class 7 Radioactive.

## **1.6 Referenced Documents**

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Referenced documents such as Acts, Industry Codes of Practice, ISO Standards and Australian Standards have been referred to throughout this document. The latest edition should always be followed to ensure that the latest safety developments are incorporated.

## **2 Risk Management Process**

This is a process that assists ship's Masters and berth operators in identifying hazards and implementing corrective measures to eliminate or reduce the risks associated with handling Packaged Dangerous Goods.

### **2.1 Hazard Identification**

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The entire process needs to be examined to identify any hazards associated with the particular type of cargo being handled and the type of transfer operation being employed:

- A single hazard (explosive, flammability, toxicity)
- Multiple hazard (mixing of hazard classes)
- Cumulative hazard (fire, explosion, environmental impact).

Other hazards also need to be considered which may be external to the process.

These hazards can include:

- Prevailing weather conditions
- Proximity of other Goods on board the ship and terminal
- Proximity of activities and facilities on board the vessel and terminal
- Hot Work.

Information for identifying hazards can be obtained from sources such as:

- IMDG Code
- Material Safety Data Sheets
- Worksafe Guidelines and Standards
- Industry publications.

## 2.2 Risk Assessment

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There are various methods of carrying out a risk assessment. The purpose of the risk assessment is to determine the consequence of:

- likely injury to people from the transfer process
- likely damage to property from the transfer process
- likely pollution to the environment
- The risks that need to be controlled
- The order in which the risks need to be controlled.

A generic assessment can be used to minimise duplication and to streamline the process. However, a responsible person should ensure that the risk assessment is:

- Valid for that transfer process
- Reviewed and current.

**Risk Management Reference Document:**

Australian Standard AS/NZS ISO 31000:2009 - Risk Management:  
Principles and Guidelines.

## Training & Inspection Programs

### 2.3 Training

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Based on risk assessments and the complexity of the handling and storage of Packaged Dangerous Goods in port areas, port users should ensure that all staff involved in the handling and storage of Packaged Dangerous Goods in port areas are provided with a formal training program.

The training should aim to ensure that each person who may be involved with handling and storage of Packaged Dangerous Goods operations achieve the requisite knowledge and competencies required to undertake the operation safely. The staff must be provided with adequate supervision until they can demonstrate they are competent in handling the operation in a safe manner.

Responsible parties should select training courses that cover the theoretical aspects of handling and storage of Packaged Dangerous Goods including relevant guidelines and regulations for staff involved in these operations.

### 2.4 Training Outcomes

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Ship and shore staff undertaking handling and storage of Packaged Dangerous Goods operations should be:

- proficient in the handling process;
- have knowledge of the hazards that may arise from the process;
- conversant with and understand the information provided on the material safety data sheets for the product/s being handled;
- conversant with the requirements of the relevant guidelines and regulations;
- Be able to respond to any emergency and assist till emergency assistance arrives.

### 2.5 Inspections

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All responsible parties involved in the handling transport and storage of Packaged Dangerous Goods operations should develop and implement a comprehensive inspection program. These inspections should be regularly undertaken and recorded. Regular inspections can identify faults and potential failures in the processes before incidents occur.

### 3 Spill Containment

Any spill during the handling and storage of Packaged Dangerous Goods operation, must be contained on the site. The immediate action is to stop all operations, report the spill incident to Emergency Services on **000** then **Melbourne VTS** on **(03) 9644 9777**, take corrective action to contain and or minimise the impact on people then environment and property.

Clean-up operations thereafter will depend on:

- The nature of the product spilt
- The quantity of product spilt
- The potential impact to the immediate area and the surrounding environment.

### 4 Impact of Spills

Measures to prevent or control the impact of a spill will require a risk assessment. The hierarchy of control will need to be employed to suit the containment and clean-up operations.

#### **Spill Impacts**

A spill may have an impact on:

- People in the immediate vicinity of the spill
- Infrastructure in the area of the spill
- Marine and land based wildlife that come in contact with the spill
- Ground water and soil.

## **5 Emergency Actions**

Emergency actions dealing with Packaged Dangerous Goods incidents may include:

### **5.1 Emergency Procedures**

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Emergency procedures are required for handling all foreseeable emergencies during a Packaged Dangerous Goods operation. Emergency procedures may vary but should include as a minimum:

- Raising of an alarm
- Action by persons to ensure their own safety and the safety of those around them
- Action by persons to minimise the damage to people, property and the environment
- Method of informing emergency services, port manager, government agencies, adjacent properties, dangerous goods owners including charterers and their agents.

### **5.2 Emergency Plans**

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The purpose and scope of an emergency plan should be designed to manage and co ordinate all aspects of the emergency. Emergency plans should include:

- Responsibilities of key personnel
- Circumstances and systems to activate the plan
- Outline teams and roles to handle various aspects of the emergency
- Additional resources such as emergency services, additional power.

For any emergency involving fire, injury, rescue or hazardous spill emergency services and Melbourne VTS must be contacted:

- Emergency Services - 000 then
- Melbourne VTS: (03) 9644 9777 VHF Channel 12 (24 hours)

## 6 Advance Notification

Note key elements of the Port Management (Port of Melbourne Safety and Property) Regulations 2010 in Division 2 – Notice requires that PoMC receive notification of the carriage of dangerous goods at least 24 hours prior to arrival in the Port either by vessel or road in the form of a properly prepared manifest.

Note that PoMC is moving from a paper based to electronic notification, system from September 2011. Dangerous goods notifications will only be accepted either as EDI files or by manual entry through the new DG Hub interface at this website: [www.dghub.com.au](http://www.dghub.com.au). This will be the mandatory notification process commencing in January 2012.

All relevant guidelines, procedures, forms and a web link to DG Hub are available from the PoMC website at the >Port Operations>Handling of Dangerous Cargoes Webpage (<http://www.portofmelbourne.com/portoperations/hazcargoes.asp>). Further information can be obtained by contacting the PoMC Health and Safety Team: [safety@portofmelbourne.com](mailto:safety@portofmelbourne.com)

### 6.1 Form of the notification

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Advance notification shall be provided to the PoMC at least 24 hours before a dangerous good is brought into the waters of a port area or onto the berth. This requirement shall apply to dangerous goods that are to be unloaded or loaded and those to be left on board. Such notification shall include the information set out in Clauses 7.2 below.

The notification must be in the form of a properly prepared and accurate EDI file using the PoMC standard for IFTDGN protect version 0.5 or entered through the DG Hub web interface.

NOTES:

- 1 The regulatory authority may also require advance notification.
- 2 A properly completed standard EDIFACT dangerous cargo message satisfies these requirements.

### 6.2 Information to be provided in the notification:

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- Name and Lloyds IMO number of ship
- Estimated date and time of arrival (ETA) of ship, or delivery of goods to port area as appropriate
- Name of agent, contact name, telephone and facsimile numbers
- If containerised, container identification number
- Number and type of packages
- Proper shipping name/correct technical name
- IMDG code classification and any subsidiary risk classification
- UN number (where applicable)

- Packaging group (where applicable)
- Quantity
- The condition of the dangerous goods, if any abnormal hazard is likely to arise
- Any known defect which may adversely affect the safety of the port area, the ship or the environment
- In the case of Classes 1, 4.1, 5.2, 6.2 or 7, additional information as specified in Chapter 5.4 of the IMDG code.

## **7 Limitations**

There are limitations on the quantities of Dangerous Goods of Class 1 Explosives and Class 5.1 Oxidising substances - Packaging Group 1 that can be handled in or transhipped/transit through the Port of Melbourne.

Note: The limits for Class 1 Explosives are set by the Victoria WorkSafe Authority in the Dangerous Goods (Explosives) Regulations 2000 and AS 3846.

Any variance of the prescribed limitations for Class 1 Explosives must be approved by WorkSafe.

Applications to vary limitations must be applied for directly to WorkSafe by the berth operator responsible for handling the Dangerous Goods.

The limits for class 5.1 Oxidising Substances - Packaging Group 1 and Ammonium Nitrate (UN 1942, 2426 and 3375), ammonium based fertilisers (UN2067), and calcium hypochlorite (UN 1748 and 2880) are as set by AS 3846.

These limitations are further clarified in following sections of this guide.

## **8 Packaged Dangerous Goods of Class 1: Explosives**

### **8.1 New Dangerous Goods (Explosives) Regulations 2011**

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Worksafe Victoria has updated the legal requirements for the manufacture, storage, sale, import, transport and use of explosives, with the introduction of the Dangerous Goods (Explosives) Regulations 2011. The regulations were made by the Minister for WorkCover following a public consultation period.

The new regulations came into effect on 26 June 2010. There is a 12 month transitional period, which means that any lawful activity under the Dangerous Goods (Explosives) Regulations 2000 will remain lawful for 12 months after the new regulations came into effect.

Most of the requirements in the old regulations are the same as the new ones. However, there are some changes introduced to improve public safety and security. They also seek to clarify responsibilities including management of Explosives within the Port – reference Refer to “Part 13: Ports”. The new regulations are available at the following web address:

[http://www.austlii.edu.au/au/legis/vic/consol\\_reg/dgr2011416/](http://www.austlii.edu.au/au/legis/vic/consol_reg/dgr2011416/)

The regulations must be read in full however key amendments for Port Operations in Part 13 include:

“requirements on the master of a vessel carrying explosives and the port manager in relation to the loading and unloading of explosives to and from vessels, and the movement of vessels carrying explosives into Victorian ports.

There is a duty on both parties not to allow a vessel carrying more than 25kg of explosives to enter a port unless it is moving to a berth that provides the separation distances specified in AS 3846 The handling and transport of dangerous cargoes in port areas.

There is also a requirement imposed on the master of a vessel carrying explosives to provide the port manager with advance notification before arriving at a port or harbour. If more than 25kg of explosives is being loaded onto or unloaded from a vessel at berth, the master of the vessel and the port manager must comply with AS 3846 for the transfer and handling of explosives.

The relevant requirements of AS 3846 must also be met:

- if other goods are being loaded or unloaded from a vessel at berth and that vessel has onboard more than 25kg of explosives
- in relation to compatibility and mixed stowage requirements
- the duty imposed on the port manager to develop an emergency plan.”

Source: Extract [Regulatory Impact Statement: Proposed Dangerous Goods \(Explosives\) Regulations 2011](#): See Page 34

## **8.2 Scope of Section:**

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The handling and transport of dangerous goods of Class 1 Explosives in the port area must be in accordance with Section 4 of AS 3846 and the requirements of WorkSafe.

## **8.3 Section 4 of AS 3846 deals with:**

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- General requirements
- Requirements relating to the ship
- Compatibility and mixed storage
- Ordinary berths
- Special berths
- Deteriorated explosives
- Traffic management
- Fork lift trucks
- Customers representative
- Electrical storms
- Emergency procedures.

The quantity restrictions of Class 1 Explosives applicable in the Port of Melbourne are regulated by WorkSafe. The quantities of each type of Explosive which can be on any ship or boat anchored, moored or berthed within the prescribed limits of the Port of Melbourne are included in the following Table 1.

**Table 1 - Port of Melbourne Corporation - Limits on Explosives**

<b>Type of Explosive</b>	<b>Quantity</b>
Explosives of Hazard Division 1.1 or 1.5 or 1.6*	25 kg NEQ
Explosives of Hazard Division 1.2, N.O.S**	200 kg NEQ
Explosives of Hazard Division 1.3, N.O.S **	2,000 kg NEQ
Explosives of Hazard Division 1.4, N.O.S **	UNLIMITED
Distress Signals: Fireworks of Classification Code 1.2G, 1.3G and 1.4G***	10,000 kg in total
Plastic Igniter Cord of Classification Code 1.4G#	2,000 kg

NOTES: -

\* For one type of article of Division 1.6, the total NEQ is that of one article. Where different types of articles of division 1.6 are involved, the total NEQ of all articles should be used.

\*\* N.O.S. means Not Otherwise Specified in this Table.

\*\*\* These include Explosives of UN No's 0191, 0195, 0197, 0238, 0240, 0313, 0334, 0335, 0336, and 0487.

# UN 0066

All Agents making enquires for handling of Explosives are advised that State Transport Regulations for Transporting Explosives must be complied with.

Any variance to the above limitations must be approved by WorkSafe.

When a ship is carrying Explosives of more than one Sub Class, the total net weight of Explosives which may be permitted is the weight applying to the most restricted Sub Class aboard in order 1.1 (most dangerous) 1.5, 1.2, 1.3, 1.6 and 1.4 (least dangerous).

Explosives of Class 1 (other than 1.4) are only allowed to enter the Port area for direct transport to or from the vessel (import and export).

**9 Packaged Dangerous Goods of Class 2, 3, 4, 5, 8 or 9**

**9.1 Scope of section**

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Packaged dangerous cargoes of class 2, 3, 4, 5, 6, 8 and 9 shall be handled in accordance with Section 5 of AS 3846 and the requirements of Worksafe.

**9.2 General Requirements for Berths**

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**Delivery to and removal from a berth:**

Unless kept in a restricted area (see Restricted area clause 6.5 in this guideline and clause 5.3 in AS 3846), quantities of materials listed in Table 2 exceeding 500 kg shall:

- be delivered to the berth within 12 hrs of their being loaded onto a vessel; and
- removed from the berth within 12 hrs of being unloaded from the vessel.

Note: Reference should also be made to clause 6.5 of this guideline and clause 5.3 of AS 3846 concerning restricted areas.

**Table 2 - Dangerous cargoes to be delivered to and removed from a berth within 12 hours**

DG Class	Packaging group	Description
2.1	-	Flammable gases
2.3	-	Toxic gases
3	PG 1	Flammable liquids
4.1	PG 1	Flammable solids and desensitised explosives
4.2	PG 1	Substances liable to spontaneous combustion
4.3	PG 1	Substances which, in contact with water, emit flammable gases
5.1	PG 1	Oxidising substances
6.1	PG 1	Toxic substances
8	PG 1	Corrosive substances

Note: "PG" indicates the "Packaging Group" as defined in the dangerous goods codes.

### **9.3 Other Dangerous Goods delivered to and removed from a berth within 5 days**

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Dangerous cargoes addressed by this section (with the exclusion of those in Table 2 and clauses 5.2.1, 5.2.3, 5.2.4 and 5.2.5 of AS 3846) shall be:

- a removed from the berth within five days of unloading from the vessel, or
- b not be delivered onto the berth more than five days before loading onto a vessel.

Containers under fumigation (UN 3359) are exempt from this requirement.

### **9.4 Class 5.1 dangerous cargoes**

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Quantities of class 5.1 PG 1 dangerous cargoes exceeding 400 tonne shall only be handled on a berth with the consent of the regulatory authority.

### **9.5 Class 5.2 material having a subsidiary risk**

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Organic peroxides of class 5.2 that have a class 1 (explosive) subsidiary risk shall be handled as given for explosives of division 1.1 (see Section 4 of AS 3846).

### **9.6 Dangerous Goods of Class 6.2**

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The receipt and handling of dangerous goods of class 6.2 (infectious substances) shall be subject to agreement with the authorities responsible for the safety of the Port.

### **9.7 Restricted area**

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Subject to a satisfactory risk assessment being carried out in conjunction with the requirements of the PoMC and WorkSafe, a designated restricted area for the keeping of Packaged Dangerous Goods on the berth may be allowed. Certain Packaged Dangerous Goods (refer to AS 3846 and Dangerous Goods (Explosives) Regulations 2000) may be kept in such an area for up to five port working days.

When evaluating the suitability of a restricted area, the following features shall be considered:

- The nature and quantities of Packaged Dangerous Goods kept in the area
- The type of equipment to be used in handling the cargo
- The adequacy of the berth operator's technical, operational, organisational and emergency safeguards
- Surrounding land uses, population densities and proximity to other hazardous installations
- The interaction of the above mentioned factors
- Proximity of other dangerous goods and their compatibility.

## **9.8 Segregation**

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Packaged dangerous cargoes of class 2, 3, 4, 5, 6, 8 and 9 shall be segregated in accordance with section 5 of the AS 3846 and the requirements of the regulating authority.

## **9.9 Road and rail transport**

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Dangerous cargoes being transported into port areas, or dangerous cargoes in port areas that are loaded for transport by road or rail, must meet the requirements of the ADG Code.

## **10 Requirements for Ammonium Nitrate and Calcium Hypochlorite**

### **10.1 Scope of section**

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Dangerous cargoes of Ammonium Nitrate and Calcium Hypochlorite shall be handled in accordance with section 6 of AS 3846 and the requirements of the regulatory authority.

### **10.2 Classification of Ammonium Nitrate and Calcium Hypochlorite**

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The term “ammonium nitrate” refers to the types of ammonium nitrate listed as Class 5.1 in the IMDG code (UN 1942) and ammonium nitrate fertilisers (UN 2067, 2426 and 3375). The term “calcium hypochlorite” refers to forms of calcium hypochlorite listed as Class 5.1 in the IMDG code (UN 1748, 2208 & 2880).

**Section 6 of AS 3846 deals with:**

- Fundamental safety
- Limitation on quantities at an ordinary berth
- Larger quantities at a special berth
- Requirements for handling Ammonium Nitrate or Calcium Hypochlorite at a special berth
- Emergency procedures
- Packaged Ammonium Nitrate and Calcium Hypochlorite in intermediate or freight bulk containers.

## 11 Requirements for Dangerous Goods of Class 7

### 11.1 Scope of section

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Dangerous cargoes of Class 7 Radiation shall be handled in accordance with Section 7 of AS 3846 and the requirements of the regulatory authority. Any materials with a specific activity greater than 70 kBq/kg are declared radioactive, and shall be handled in accordance with the requirements of this section.

Packages or freight containers containing radioactive substances shall not be brought into the port area unless they conform to the International Atomic Energy Agency (IAEA) Regulations for the safe transport of radioactive material, 2005 Edition (Revised), and incorporated in the Australian Code of Practice for the Safe Transport of Radioactive material (2000), under the Australian Radiation Protection and Nuclear Safety Act 1998.

Note: The IMDG Code also requires conformity with the IAEA Regulations for the Safe Transport of Radioactive Material, mentioned above.

Packages or freight containers that contain radioactive substances shall be stowed on the ship, or kept on a berth, in a manner that prevents any harmful effects to persons and possible interaction between packages.

**Section 7 of AS 3846 deals with:**

- Exposure to Dangerous Cargoes of class 7
- Transport of Dangerous Cargoes of class 7
- Shore storage of Dangerous Cargoes of class 7
- Ships stowage of Dangerous Cargoes of class 7
- Handling procedures
- Damage, spillage and leakage procedures.

**Table 3 - Segregation of yellow label packages or freight containers from places frequented by persons**

<b>Sum of transport indices</b>	<b>Minimum segregation distances (m)</b>
<5	4
>5 <10	6
>10 <20	8
>20 <30	10
>30 <40	12
>40 <50	13
>50 <100	18
>100 <150	22
>150 <200	26

The segregation distances in Table 3 apply regardless of whether walls or ceilings intervene between the storage area and the occupied space.

PoMC requires that any port users who are involved in the handling of transitory Packaged Dangerous Goods comply with the requirements of Australian Standard 3846.

The Standard is designed to assist port users when involved in the handling and storage of all classes of Packaged Dangerous Goods in the port area to identify the hazards, assess the risk and adopt the necessary control measures required to eliminate or minimise the risk to as low as reasonably practicable.

Port users have a duty of care towards their own personnel to ensure that the handling and storage of Packaged Dangerous Goods are conducted safely.

Port users should ensure that a hazard identification and risk assessment is conducted for the entire transfer operation. Any hazards, risks or issues identified during the assessment should be resolved by a risk management process as discussed under Section 2 – Risk Management Process.

Note: Dangerous goods of Class 7: Radioactive are regulated by the Victorian Department of Health - Department of Human Services.