

Port Authority of New South Wales

Dangerous Goods Management Guidelines for Ports in NSW

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PREFACE

Port Authority of NSW ('Port Authority') has the responsibility to administer the NSW legislation which controls the conditions under which Dangerous Goods (DGs) are handled and/or kept in the operational areas of the commercial ports in NSW.

This guideline has been prepared to assist all port users involved in the management and handling of DGs for import, export, transhipment and transit within the Port Operational Area of ports in NSW. It principally covers the following activities:

- Advance notification of DG cargoes;
- Requirements for the safe management and handling of DGs in Port Operational Areas;
- Notification of, and response to, incidents involving DGs; and
- Exemptions

Current Reference Documents

Legislation

- Part 11 (Special requirements relating to ports) of the NSW Dangerous Goods (General) Regulation 1999 (Saved by clause 63 in Schedule 18B of the NSW Work Health and Safety Regulation 2011 and clause 702A in Part 11.3 of the NSW Work Health and Safety Regulation 2017).
- AMSA Marine Order 41 (Carriage of Dangerous Goods) 2009 in effect under the Navigation Act 2012.

Codes and Standards

- Australian Standard 3846 – 2005 "The Handling and Transport of Dangerous Cargoes in Port Areas".
- Australian Code for the Transport of Explosives by Road and Rail, 3rd edition (April 2009).
- The International Maritime Dangerous Goods (IMDG) Code (Current version).
- The Code of Practice for the Safe Transport of Radioactive Material (RPS 2) [Adoption of the International Atomic Energy Agency Regulations for the Safe Transport of Radioactive Material 2005 Edition (No. TS-R-1)].
- Australian Code for the Transport of Dangerous Goods by Road & Rail.

Other Reference Documents

These guidelines may incorporate by reference, wholly or in part and with or without modification, any guidelines, standards, rules, codes, specifications or methods, as in force at a particular time or as in force from time to time, prescribed or published by an authority or body (whether or not it is a New South Wales authority or body).

Record of Amendments

Version	Description of Amendment/s	Authorisation	Date
1			

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Abbreviations and Definitions

AMSA	Australian Maritime Safety Authority
ARPANSA	Australian Radiation Protection and Nuclear Safety Agency
AS3846	Australian Standard 3846 – 2005 “The Handling and Transport of Dangerous Cargoes in Port Areas”.
Berth	A berth is defined to be: any dock, pier, jetty, quay, wharf, marine terminal or similar structure (whether floating or not) at which a vessel may tie up, and includes any plant or premises (other than a vessel) used for purposes ancillary or incidental to the loading or unloading of cargoes of Dangerous Goods within a Port Operational Area.
cPORTS	Commercial Ports Online Registration and Tracking System
DG(s)	Dangerous Good(s) Dangerous Goods are substances and articles that: <ul style="list-style-type: none">• Satisfy the UN tests and criteria for determining whether they are a DG;• Are listed in the IMDG Code;• Defined within clause 1.4.20 of the AS3846;• Does not include the handling or transport of dangerous goods, other than bunkering fuel, required for the navigation, safety or maintenance of a vessel and forming part of the equipment or stores of the vessel, and• Are determined to be a DG by the Port Authority.
Harbour Master	The Port Authority of New South Wales Harbour Master has powers under the Marine Safety Act 1998 to direct and control the time and manner in which any vessel may enter or leave the port.
IBC	Intermediate Bulk Container A rigid or flexible portable packaging for the transport of Dangerous Goods, as defined in the IMDG Code.
IMDG Code	International Maritime Dangerous Goods (IMDG) Code as may be updated from time to time
MO	Marine Order
NEQ	The Net Explosive Quantity (expressed as a mass) of an explosive, exclusive of any non-explosive components.
NSW	New South Wales
Port Authority	Port Authority of New South Wales
Port Operational Area	The operational area of a port, which is defined in Part 11 of the NSW DG Regulations 1999 to be: <ul style="list-style-type: none">(a) a port, or(b) a vessel in a port, or(c) a wharf, or(d) a storage tank connected to a wharf, or(e) any property: (i) vested in or controlled by the Minister, and (ii) used for the handling of dangerous goods on to or from a vessel The geographic limits of the Port Operational Area at Port Botany, Port Kembla and the Port of Newcastle is shown in Appendix A.

Protected Place	Protected places are defined in AS 3846 to be any of the following: <ul style="list-style-type: none">(a) A dwelling, place of worship, public building, school or college, hospital, theatre or any building or open area in which persons are accustomed to assemble, whether within or outside the port area.(b) A factory, workshop, office, store, warehouse, shop, or building where people are employed that is outside the boundary of the site where the dangerous cargoes are handled.(c) A vessel at permanent berthing facilities.(d) Any storage facility for dangerous cargoes that is outside the property boundary of the port area, except those defined as minor storages in other Standards or Regulations.
SHIPS	Sydney Harbour Integrated Port System
Terminal Operator	An organisation engaged in the business of providing stevedoring, movement of cargo to/from vessels, storage or warehousing services in or on a terminal
Transhipment Cargo	Cargo that is off-loaded from one vessel and loaded onto another vessel. Transhipment cargo does not leave the Port Operational Area as import cargo.
Transit Cargo	Cargo on board a vessel that only passes through the Port Operational Area whilst in transit to another port. This cargo may be temporarily moved for operational reasons, but cannot be transferred to a different vessel whilst in the Port Operational Area and cannot leave the Port Operational Area as import cargo.
UN	United Nations
VTIC	Vessel Traffic and Information Centre
VTICO	(Duty) Vessel Traffic and Information Centre Officer
VTS	Vessel Traffic Service
WHS	Work Health and Safety

While care was taken in the production of this Guideline by Port Authority, its purpose is to act as a general guide and to provide information in the form of a broad overview. Port Authority does not accept responsibility for any errors or omissions and will not be held liable for any damage or injury arising out of the use or interpretation of any of the content of this Guideline. A copy of the legislation is available at legislation.nsw.gov.au or seek independent legal advice.

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1 Introduction

1.1 Purpose of these Guidelines

This guideline has been prepared by Port Authority to assist port users to better understand the specific requirements for the management of Dangerous Goods (DGs) at Port Operational Areas (Refer to Appendix A) in NSW.

Facilities located outside the relevant Port Operational Areas are not covered by these guidelines.

The relevant requirements for DG cargoes are outlined in this guideline. These are applicable for import, export, transhipment and in-transit DG cargoes.

This guideline is produced for guidance only and is not intended to be a complete or comprehensive review of all statutory requirements, nor does it detail the stevedore(s), terminal and/or shipping line user requirements.

1.2 Additional Requirements Prior to Arrival at a Port in NSW

These guidelines primarily cover the specific requirements for the management of DG cargoes whilst at a port in NSW or immediately prior to a vessel's arrival (i.e. advance notification of DG cargoes). However, it is still expected that any vessel entering a Port Operational Area in NSW will have complied with all relevant Federal and International statutory requirements. For example:

- No person may offer DGs for transport by sea, unless those goods are properly packaged, marked, labelled, placarded, described and certified on a transport document in accordance with the IMDG Code, AMSA Marine Order 41 and AS 3846:2005.
- All relevant organisations are expected to be able to prove full compliance with the training requirements from:
 - IMDG Code, Paragraph 1.3.1 - "Training of Shore-Side Personnel";
 - AMSA Marine Order 41, Section 8 - "Requirements for Training"; and
 - AS 3846:2005, Clause 2.4.3 – "Training".

1.3 Offences

Failure to comply with requirements set out in this guideline, including failure to provide complete and accurate information to the Port Authority or failure to comply with the provisions of AS3846, may result in prosecution or penalty notices being issued in accordance with Part 11 of the NSW Dangerous Goods (General) Regulation 1999 (Saved by clause 63 in Schedule 18B of the NSW Work Health and Safety Regulation 2011 and clause 702A in Part 11.3 of the NSW Work Health and Safety Regulation 2017).

2 Advance Notification of Dangerous Cargoes

2.1 Introduction

Port Authority must be advised of all DG cargoes to be imported or exported by a vessel at a port in NSW, including transshipments and/or goods transiting a port in NSW.

Advance notification of all DG cargoes is to be provided using the relevant electronic notification system, as follows:

- **Port Botany** – ‘Sydney’s Integrated Port System’ (ShIPS).
- **Port Kembla and Port of Newcastle** – ‘Commercial Ports Online Registration and Tracking System’ (cPORTS).

Users must contact the Port Authority office at each relevant port for access to the relevant system.

Note: Each system requires user registration. Guidance on how to use each system may be available on-line and is not reproduced in these guidelines.

Port Authority may in its sole discretion accept notification of a DG cargo in an alternative form and only if the relevant electronic notification system is not operational at the relevant time. However, any such acceptance will be conditional upon the lodgement being correctly entered into the relevant electronic notification system once it returns to operation. When an electronic notification system is out of operation for a short period, and this has been communicated to users in advance (i.e. shutdowns for scheduled maintenance and system upgrades), other forms of lodgement will not be accepted and entries must be made into the electronic notification system either prior to the shutdown or immediately following its return to operations.

Notification via the relevant NSW electronic system does NOT fulfil the DG requirements of the Australian Maritime Safety Authority (AMSA), which must be made separately.

2.2 Cargo Classification

Each DG cargo is classified as a **RED**, **AMBER** or **GREEN** line cargo. This determines the maximum permitted time limit that the DG cargo may be present within a Port Operational Area (Refer to Section 3.4).

Classification as a **RED**, **AMBER** or **GREEN** line cargo is an automated process within the relevant electronic notification system (Refer to Section 2.1). Once the UN Number, Packing Group and quantity of the DGs are entered into the system, the **RED**, **AMBER** or **GREEN** line cargo status will be displayed automatically.

Note: As a guide only, the Port Authority web page includes a lookup table:

<https://www.portauthoritynsw.com.au/>

Enter the UN number and the permitted time periods will be displayed for the appropriate packing groups where applicable. This is based on an assumption of the net weight of product being in excess of 500 kg.

2.3 Empty, Uncleaned Packages or Units Not Containing DGs

Empty cargo transport units still containing residues of DGs, or loaded with empty uncleaned packages, or empty uncleaned bulk containers, shall comply with the provisions applicable to the goods contained in the unit, packaging or bulk container.

Other than for DG Class 7 radioactive materials, a packing, including an IBC (Intermediate Bulk Container), which previously contained DGs, shall be identified, marked, labelled and placarded as required for those DGs unless steps such as cleaning, purging of vapours or refilling with a non-dangerous substance are taken to nullify any hazard.

Information for fumigated containers (DG Class 9, UN No. 3359) that contain no other DGs, is still required to be provided using the relevant electronic notification system (Refer to Section 2.1).

2.4 Vessel Information Does Not Appear in Notification System

If the vessel information does not appear in the electronic notification system (Refer to Section 2.1), then please contact the relevant Shipping Agent.

2.5 Notification Timing

The responsible consignor or agent for the DGs must give the Port Authority for the port:

- (a) *in the case of explosives – at least 48 hours' notice before the arrival of the explosives in the port or a terminal of the port, and*
- (b) *in the case of any other class of dangerous goods – at least 24 hours' notice before the arrival of the goods in the port or a terminal of the port.*

2.5.1 Imports

Notifications for DG Class 2, 3, 4, 5, 6, 7, 8 & 9 **import** cargoes must be lodged using the relevant electronic system (Refer to Section 2.1) at least 24 hours prior to the vessel entering the Port Operational Area. This is increased to 48 hours for DG Class 1 explosives.

2.5.2 Transhipments

Notifications for **transshipment** cargoes that include DGs must be lodged using the relevant electronic system (Refer to Section 2.1) as follows:

- For an incoming vessel, 24 hours prior to the vessel entering the Port Operational Area for DG Class 2, 3, 4, 5, 6, 7, 8 & 9 **transshipment** cargoes. This is increased to 48 hours for DG Class 1 explosives.

- For an outgoing vessel, 24 hours prior to the cargo being on the terminal or in the Port Operational Area for DG Class 2, 3, 4, 5, 6, 7, 8 & 9 **transshipment** cargoes. This is increased to 48 hours for DG Class 1 explosives.

2.5.3 Exports

Notifications for DG Class 2, 3, 4, 5, 6, 7, 8 & 9 **export** cargoes must be lodged using the relevant electronic system (Refer to Section 2.1) at least 24 hours prior to the DGs being delivered to the Port Operational Area. This is increased to 48 hours for DG Class 1 explosives.

2.5.4 Transit Cargo

Notifications for DG Class 2, 3, 4, 5, 6, 7, 8 & 9 **transit** cargoes must be lodged using the relevant electronic system (Refer to Section 2.1) at least 24 hours prior to the vessel entering the Port Operational Area. This is increased to 48 hours for DG Class 1 explosives.

2.6 Vessel Declaration

A vessel declaration is required to be lodged by the Shipping Agent using the relevant electronic system. If DGs are on board, then a DG declaration is also required as part of the vessel declaration. The DG declaration is included in the relevant electronic notification system (Refer to Section 2.1).

2.7 Port Entry Approval

The Port Authority may grant approval (a 'port entry approval') for a cargo of DGs to be brought into the waters of the port or in or on a terminal of the port.

The responsible Consignor or Shipping Agent must ensure that a port entry approval has been granted by the Port Authority at least 24 hours before the DGs arrive at a port in NSW.

To obtain approval, all required information regarding the DGs must be entered into the relevant electronic notification system (Refer to Section 2.1).

3 Dangerous Goods in Port Operational Areas

3.1 Introduction

The requirements in this section of the guideline are applicable for the handling of DGs in, or on, the Port Operational Areas of Port Botany, Port Kembla and the Port of Newcastle. The Port Operational Area includes:

- a port;
- a vessel in a port;
- a wharf;
- a storage tank connected to a wharf; or
- any property vested in, or controlled by, the Minister and used for the handling of DGs onto or from a vessel.

The geographic limits of the Port Operational Areas for Port Botany, Port Kembla and the Port of Newcastle are included in Appendix A.

Note: DG carriage into Sydney harbour will be approved on a case-by-case basis.

3.2 Quantity Limits for Dangerous Goods

There are limitations on the quantities of some DGs that are permitted on a vessel and for various berths at ports in NSW.

The specific limits are included in Section 3.6.2 for DG Class 1 Explosives and Section 3.7.2 for some DG Class 5.1 Oxidising Substances.

If, during advance notification of the DG cargoes, it is determined that the quantity of DGs on a vessel or berth will exceed the corresponding quantity limit specified in this guideline, then Port Authority should be contacted immediately (Note: A warning that the quantity limits will be exceeded may be flagged in the electronic lodgement system). Depending on the circumstances, entry of the vessel into port may be refused and the vessel may have to be redirected.

3.3 Separation and Segregation of Dangerous Goods

Quantity limits for DG Class 1 explosives and some DG Class 5.1 oxidising substances have been determined to ensure there is adequate separation to the identified protected places at each port in NSW. Any change to the type or location of these protected places may trigger a change to the corresponding berth limit; therefore, Terminal Operators must ensure compliance with both the quantity limits and separation distances. In some cases, the quantity limits and separation distances may vary for a berth due to specific operational constraints (e.g. if a vessel is present at an adjacent berth) and additional requirements may apply (e.g. ensuring a vessel is positioned at the berth to maximise the separation distance to the protected places). The separation requirements are included in Sections 3.6 and 3.7.

Separation distances may also apply to protect workers and members of the public from exposure to DG Class 7 radioactive materials. The separation requirements are included in Section 3.8.

DGs must also be segregated from other incompatible materials, including other DGs and some non-DGs (e.g. foodstuffs). The separation distances required to segregate different classes of DGs in closed containers, portable tanks, or closed road vehicles are included in 0 (Note: segregation for DG Class 7 radioactive materials is addressed separately in Section 3.8.4).

3.4 Permitted Time Limits for Dangerous Goods

Each DG cargo is categorised as a '**RED** Line', '**AMBER** Line' or '**GREEN** Line' cargo, which then defines the permitted time limits as outlined in Sections 3.4.1 - 3.4.3.

Note: The term "availability of cargo" is used by the stevedores and does not affect the permitted time limits for Dangerous Goods.

3.4.1 RED Line Cargo

- All **RED** line import cargo shall be removed from the Port Operational Area within **2 hours** of being unloaded from a vessel.
- All **RED** line export cargo shall be delivered to the Port Operational Area within the **2-hour** period prior to the cargo being loaded onto a vessel.
- All **RED** line transshipment cargo shall be removed from the Port Operational Area within **2 hours** of being unloaded from a vessel.
- All **RED** line transit cargo is not to be moved on board or placed temporarily ashore whilst the vessel is at the Port Operational Area without the specific written permission of Port Authority.
- The **2-hour** time limit includes weekends and/or public holidays.

Note: The maximum time permitted for transshipment cargoes between being unloaded from a vessel and loaded onto a vessel is 2 hours. Transshipment cargoes do not have a combination of 2 hours at the Port Operational Area as an import, plus another 2 hours at the Port Operational Area as an export without being removed from the Port Operational Area.

Table 1 RED Line Cargoes

Port	RED Line Cargo
Port Botany	All DG Class 1, except DG Class 1.4 All DG Class 6.2 All DG Class 7, except DG Class 7 Low Specific Activity (LSA) substances
Port Kembla	All DG Class 1, except DG Class 1.4 All DG Class 6.2 All DG Class 7, except DG Class 7 Low Specific Activity (LSA) substances
Port of Newcastle	All DG Class 1, except DG Class 1.4 Ammonium Nitrate (DG Class 5.1, UN Numbers: 1942, 2067, 2426 & 3375) at special berths All DG Class 6.2 All DG Class 7, except DG Class 7 Low Specific Activity (LSA) substances

3.4.2 AMBER Line Cargo

- All **AMBER** line import cargo shall be removed from the Port Operational Area within **12 hours** of being unloaded from a vessel.
- All **AMBER** line export cargo shall be delivered to the Port Operational Area within the **12-hour** period prior to the cargo being loaded onto a vessel.
- All **AMBER** line transhipment cargo shall be removed from the Port Operational Area within **12 hours** of being unloaded from a vessel.
- All **AMBER** line transit cargo may be moved on board or placed temporarily ashore for operational reasons whilst the vessel is at the Port Operational Area.
- The **12-hour** time limit includes weekends and/or public holidays.

Note: The maximum time permitted for transhipment cargoes between being unloaded from a vessel and loaded onto a vessel is 12 hours. Transhipment cargoes do not have a combination of 12 hours at the Port Operational Area as an import, plus another 12 hours at the Port Operational Area as an export without being removed from the Port Operational Area or unless an exemption has been obtained (refer to Section 5.3).

Table 2 AMBER Line Cargoes

Port	AMBER Line Cargo
Port Botany	All DG Class 1.4 All DG Class 7 Low Specific Activity (LSA) substances All break-bulk DG cargoes All containers packaged with more than 500kg of: <ul style="list-style-type: none"> • DG Class 2.1 (Flammable gases - Excluding UN 1950 Aerosols) • DG Class 2.3 (Toxic gases) • DG Class 3 (Flammable liquids), Packing Group I • DG Class 4.1 (Flammable solids, self-reactive substances and solid desensitised explosives), Packing Group I • DG Class 4.2 (Substances liable to spontaneous combustion), Packing Group I • DG Class 4.3 (Substances which, in contact with water, emit flammable gases), Packing Group I • DG Class 5.1 (Oxidizing substances), Packing Group I • Ammonium Nitrate (DG Class 5.1, UN Numbers: 1942, 2067, 2426 & 3375) • Calcium Hypochlorite (DG Class 5.1, UN Numbers: 1748, 2880, 3485 & 3487) • DG Class 6.1 (Toxic substances), Packing Group I • DG Class 8 (Corrosive substances), Packing Group I
Port Kembla	All DG Class 1.4 All DG Class 7 Low Specific Activity (LSA) substances All break-bulk DG cargoes All containers packaged with more than 500kg of: <ul style="list-style-type: none"> • DG Class 2.1 (Flammable gases - Excluding UN 1950 Aerosols) • DG Class 2.3 (Toxic gases) • DG Class 3 (Flammable liquids), Packing Group I • DG Class 4.1 (Flammable solids, self-reactive substances and solid desensitised explosives), Packing Group I • DG Class 4.2 (Substances liable to spontaneous combustion), Packing Group I • DG Class 4.3 (Substances which, in contact with water, emit flammable gases), Packing Group I • DG Class 5.1 (Oxidizing substances), Packing Group I • Ammonium Nitrate (DG Class 5.1, UN Numbers: 1942, 2067, 2426 & 3375) • Calcium Hypochlorite (DG Class 5.1, UN Numbers: 1748, 2880, 3485 & 3487) • DG Class 6.1 (Toxic substances), Packing Group I • DG Class 8 (Corrosive substances), Packing Group I

Port	AMBER Line Cargo
Port of Newcastle	<p>All DG Class 1.4 All DG Class 7 Low Specific Activity (LSA) substances All break-bulk DG cargoes. All containers packaged with more than 500kg of:</p> <ul style="list-style-type: none"> • DG Class 2.1 (Flammable gases - Excluding UN 1950 Aerosols) • DG Class 2.3 (Toxic gases) • DG Class 3 (Flammable liquids), Packing Group I • DG Class 4.1 (Flammable solids, self-reactive substances and solid desensitised explosives), Packing Group I • DG Class 4.2 (Substances liable to spontaneous combustion), Packing Group I • DG Class 4.3 (Substances which, in contact with water, emit flammable gases), Packing Group I • DG Class 5.1 (Oxidizing substances), Packing Group I • Ammonium Nitrate (DG Class 5.1, UN Numbers: 1942, 2067, 2426 & 3375) at ordinary berths • Calcium Hypochlorite (DG Class 5.1, UN Numbers: 1748, 2880, 3485 & 3487) • DG Class 6.1 (Toxic substances), Packing Group I • DG Class 8 (Corrosive substances), Packing Group I

3.4.3 GREEN Line Cargo

- All **GREEN** line import cargo shall be removed from the Port Operational Area within **5 days** of being unloaded from a vessel.
- All **GREEN** line export cargo shall be delivered to the Port Operational Area within the **5-day** period prior to the cargo being loaded onto a vessel.
- All **GREEN** line transhipment cargo shall be removed from the Port Operational Area within **5 days** of being unloaded from a vessel.
- All **GREEN** line transit cargo may be moved on board or placed temporarily ashore for operational reasons whilst the vessel is at the Port Operational Area.
- The **5-day** time limit includes weekends and/or public holidays.

Note: The maximum time permitted for transhipment cargoes between being unloaded from a vessel and loaded onto a vessel is 5 days. Transhipment cargoes do not have a combination of 5 days at the Port Operational Area as an import, plus another 5 days at the Port Operational Area as an export without being removed from the Port Operational Area, or unless an exemption has been obtained (refer to Section 5.3).

*Note: The berth operator, Port of Newcastle applies a 3-day time limit for all dangerous goods cargo including **GREEN** line cargo at the Mayfield No. 4 berth in the Port of Newcastle. This reduced time limit is a condition of approval from the NSW Department of Planning and only applies at this berth. In accordance also with the planning conditions for*

the operation of the berth, no Class 7 Dangerous Goods are allowed at Mayfield No 4. For more information, please refer to Port of Newcastle’s Operational Environmental Management Plan available at:

[https://www.portofnewcastle.com.au/Resources/Documents/Operational-Environmental-Management-Plan-\(OEMP\)----Web-Version.pdf](https://www.portofnewcastle.com.au/Resources/Documents/Operational-Environmental-Management-Plan-(OEMP)----Web-Version.pdf).

Table 3 GREEN Line Cargoes

Port	GREEN Line Cargo
Port Botany	All DG Class 2, 3, 4, 5, 6, 8 or 9 cargoes, other than those listed in Table 1 or Table 2.
Port Kembla	All DG Class 2, 3, 4, 5, 6, 8 or 9 cargoes, other than those listed in Table 1 or Table 2.
Port of Newcastle	All DG Class 2, 3, 4, 5, 6, 8 or 9 cargoes, other than those listed in Table 1 or Table 2.

Note: Fumigated containers (DG Class 9 UN3359) containing no other DGs are required to be lodged in the relevant notification system (Refer to Section 2.12.1), but are exempt from the 5-day time period at the Port Operational Area.

3.5 Notification of Work Activities

Port Authority must be notified of work activities to be undertaken on board vessels carrying DGs in the Port Operational Area. Such works include, but are not limited to, the following:

- engine immobilisation;
- engine trials;
- hot work;
- underwater inspections;
- propeller polishing;
- lifeboat drills;
- tank washing or prewashing;
- work carried out on fire-fighting systems; or

Prior notification of the work activities is to be made via **SHIPS** (Port Botany) or **cPORTS** (Port Kembla or Port of Newcastle).

Activities must be carried in accordance with the conditions of the notification. Such activities may be subject to review by Port Authority personnel.

3.6 Additional Requirements for DG Class 1 Explosives

3.6.1 Introduction

Explosives are designated as DG Class 1 and there are six Divisions: 1.1, 1.2, 1.3, 1.4, 1.5 and 1.6. Within the Divisions, compatibility groups are also assigned to define which explosive can be safely stowed and transported together.

The numbers and letters in the classification system relate to the sensitivity, mass explosion hazard and projectile hazard of a particular type of explosive.

Typically:

- Commercial blasting type explosives are classified as Division 1.1, with Compatibility Group D (Commonly depicted as 1.1D);
- Detonators are classified as Division 1.1B or 1.4B;
- Display fireworks are classified as Division 1.3G or 1.4G; and,
- Shop-goods varieties of fireworks are usually classified as Division 1.4S.

Separation distances vary according to the classification of the explosives and are based on the distance required to achieve an acceptably low level of risk to property and people should the total quantity of explosives be involved in an explosion.

Port Authority has specified separation distance and Net Explosive Quantity (NEQ) limits based on International testing and experience. The separation distances and NEQ limits included in Table 4 (Refer to Section 3.6.2) are to be strictly observed.

3.6.2 Quantity Limits for DG Class 1 Explosives

The following critical points apply for DG Class 1 explosives:

- The quantity limits for DG Class 1 explosives apply to, and are inclusive of, transit cargo.
- All references to explosive quantity are references to Net Explosive Quantity (NEQ), which is the actual quantity of explosive in a cargo (Column 4), expressed in kilograms excluding all packaging materials and non-explosive components, as detailed in Table 2.
- Notifications for DG Class 1 cargoes must be lodged using the relevant electronic system (Refer to Section 2.1) at least 48 hours prior to the vessel entering the Port Operational Area (Refer to Section 2.5).
- The stevedore should be contacted to ensure that they have all the necessary documentation and contact details at least 48 hours prior to the vessel's Estimated Time of Arrival at the Port Operational Area.
- Note: The "ShIPS" system used at Port Botany must be monitored to ensure the red "L" flag (if activated) has been resolved at least 24 hours prior to the vessel's Estimated Time of Arrival or the vessel may not be permitted to enter port waters.

CAUTION

No exceptions to the maximum NEQ limits identified in Table 4 will be permitted in a Port Operational Area without the express and prior approval of Port Authority.

Table 4 Maximum Permitted NEQ On-Board a Vessel at a Berth

Berth (Note A)	Maximum Permitted NEQ (kilograms) (Note C)							
	DG Class 1.1, 1.5 & 1.6 – Total NEQ (Note D)		DG Class 1.2		DG Class 1.3		DG Class 1.4	
Column 1	Column 2		Column 3		Column 4		Column 5	
	Quantity (KG)	Separation distance (Note B)	Quantity (KG)	Separation distance (Note B)	Quantity (KG)	Separation distance (Note B)	Quantity (KG)	Separation distance (Note B)
PORT BOTANY BERTHS								
1 HD	25	10m	25	50m	2,000	10m	85,000	20m
2 HD	25	10m	25	50m	2,000	10m	85,000	20m
6 BD	25	10m	25	50m	2,000	10m	85,000	20m
7 BD	25	10m	25	50m	2,000	10m	85,000	20m
8 BD	25	10m	25	50m	2,000	10m	85,000	20m
9 BD	25	10m	25	50m	2,000	10m	85,000	20m
10 BD	25	10m	25	50m	2,000	10m	85,000	20m
11 BD	25	10m	25	50m	2,000	10m	85,000	20m
12 BD	25	10m	25	50m	2,000	10m	85,000	20m
12 BD (Note E)	1,000	150m	1,000	150m	15,000	158m	On Application	
PORT KEMBLA BERTHS								
104	460	90m	460	90m	2,800	90m	250,000	90m
105	910	140m	910	140m	10,000	140m	250,000	140m
106 (Note F)	2,000	240m	4,500	240m	53,000	240m	250,000	240m
107 (Note G)	1,060	155m	1,000	155m	15,000	155m	250,000	155m
202 or 203 (Note H)	3,240	307m	17,500	307m	110,000	307m	250,000	307m
PORT OF NEWCASTLE BERTHS								
EB1	315	70m	315	70m	2,390	70m	250,000	70m
EB2	1,245	170m	1,245	170m	18,350	170m	250,000	170m
K2	250	60m	250	60m	2,325	60m	250,000	60m
K3	315	70m	315	70m	2,390	70m	250,000	70m
M4	10,000 (Note I)	550m	250,000	550m	250,000	550m	250,000	550m
WB4	315	70m	315	70m	2,390	70m	250,000	70m

Notes to Table 4:

- A. No berth other than those listed in Table 2, (Column 1) has approval for handling explosives.
- B. The listed separation distance (Column 2, 3, 4 and 5) is the minimum distance to the closest Protected Place, and/or the closest accommodation quarters of another vessel at a nearby berth, for the reported maximum permitted NEQ.
A vessel carrying a DG Class 1 cargo is to be berthed in a direction that allows the quickest departure from the berth in an emergency, unless directed otherwise (As per AS3846-2005, Clause 4.4.1(b)). Therefore, a vessel carrying a DG Class 1 cargo must be bow out at the berth. The DG Class 1 explosives are assumed to be stowed near the bow of the vessel.
- C. Identifies the total amount of NEQ permitted to be handled at a berth at one time. The quantity limits for DG Class explosives apply to, and are inclusive of, transit cargo. Where a vessel is carrying explosives of more than one division, the total NEQ of explosives which may be permitted is the NEQ applying to the most restrictive division on-board.
If dangerous cargoes of Class 1 (except 1.4S) are to be handled simultaneously with emulsion precursors (UN No. 3375), then the total quantity of these materials shall be considered as Class 1 and the relevant separation distances shall apply.
- D. For one type of article of division 1.6, the total NEQ shall be that of one article (largest individual NEQ amount) (Column 3). Where different types of articles of division 1.6 are involved, the total NEQ of all articles shall be used.
Where ammonium nitrate is to be handled simultaneously with explosives of Divisions 1.1, 1.5 or 1.6, then 50% of the quantity of ammonium nitrate shall be added to the explosives quantity to obtain the resultant NEQ, and the relevant separation distance shall apply.
- E. For export only at 12 BD. Special prior permission is required from the Port Authority to export DG Class 1 cargoes at the reported NEQ limits.
- F. The NEQ limits for berth 106 only apply when:
- There are no persons in the Gear Shed during the loading/unloading operation;
 - No vessel is berthed at 105, unless berthed with accommodation East of chainage - 5m; and
 - The accommodation block for a vessel berthed at 107 is North of chainage 260m.
- G. The NEQ limits for berth 107 only apply when:
- There are no persons in G Block (Southern end of Shed) during the loading/unloading operation; and
 - The accommodation block of any vessel at berth 106 is at the eastern end of the vessel.
- H. If unloading at 202 then no other vessel may be berthed at 203 (or vice versa) since the accommodation of the adjacent vessel would be closer than the separation distance nominated in Columns 2, 3, 4, 5 (i.e. 307 m).
- I. Limit imposed by NSW Department of Planning, Industry and Environment. Any requests for exemptions or extensions must be sought from the berth operator, Port of Newcastle, and approved by NSW Department of Planning, Industry and Environment.

3.6.3 Safety Requirements for DG Class 1 Explosives

The following Port Authority requirements apply to the handling and transport of explosives at ALL Port Operational Areas:

- a. All Explosives loaded or unloaded in Port Kembla or the Port of Newcastle must be supported by the completed Checklist Forms 1.4, 1.5, 1.6, 1.7, 1.8, 1.9 and 1.10 (See below).

Note: At Port Botany, the Checklist Forms are only required to be completed if the NEQ quantities in Table 4 are to be exceeded (Also refer to “bb” below).

- Form 1.4 Shipment Notification and Planning
- Form 1.5 Before Explosives Enters Port
- Form 1.6 Before Unloading and/or Loading an Explosive Shipment
- Form 1.7 After Unloading and/or Loading Explosives is completed
- Form 1.8 Vessel Cargo Safety Alert (Note: To be promulgated by Facility Operator)
- Form 1.9 Safe Work Procedures (Note: Separate forms are to be completed by the facility operator and stevedore)
- Form 1.10 Explosive Notification Protected Place and/or Vessel Accommodation of another Vessel

Port users must contact Port Authority office at each relevant port to obtain current copies of the blank Checklist Forms.

- b. Explosives shall not be unloaded from a vessel unless the means of transport, by which they are to be removed from the Port Operational Area, is present and ready to receive them.
- c. Explosives (Excluding Division 1.4) should be taken directly to or from a vessel, and in no circumstances be held on a berth for more than 2 hours.
- d. Explosives of Division 1.4 should be taken directly to or from a vessel, and in no circumstances be held on a berth for more than 12 hours.
- e. Explosives shall be unloaded as soon as reasonably practicable (within 2 hours of the vessel being secure at the berth).
- f. Explosives (Excluding Division 1.4) shall not be brought to a berth for loading onto a vessel unless the vessel is ready to receive them.
- g. Explosives of Division 1.4 shall not be brought to a berth for loading onto a vessel unless the vessel is ready to receive them within 12 hours of being at the Port Operational Area. In no circumstances are the goods to be held at the Port Operational Area for more than a total of 12 hours.
- h. All personnel not essential to the loading or unloading of explosives shall be excluded from the area of the berth where explosives are being handled, including a space of at least 15 metres beyond the immediate handling area, while the explosives are being loaded/unloaded from the vessel.

- i. The handling of explosives, once commenced, shall proceed without delay or interruption, except during an electrical storm. Operations shall be suspended during the storm and not resumed until it has passed.
- j. Explosives shall not be handled unless they have been classified in accordance with the IMDG Code (as amended).
- k. Explosives shall be handled in a safe, efficient and secure manner.
- l. The vessel shall depart from the Port Operational Area within 2 hours of completion of loading of explosives (Excluding Division 1.4).
- m. A vehicle must leave the Port Operational Area as soon as possible on completion of being loaded with explosives (Excluding Division 1.4) and in all circumstances within 2 hours of the explosive being unloaded from the vessel.
- n. On completion of a vehicle being loaded with explosives of Division 1.4, it must leave the Port Operational Area as soon as possible and within 12 hours of the explosive being unloaded from the vessel.
- o. Where more than 100 kg of explosives (other than Division 1.4) are to be loaded or unloaded in the Port Operational Area, a customer's representative who has immediate access to specialist advice in the case of an emergency, shall be contactable by phone and be immediately available while the explosives are being loaded and/or unloaded.
- p. The phone contact to the customer representative must be verified prior to commencement of the loading/unloading of the vessel and/or vehicle. The customer's representative role shall not involve a command or control position in the event of an incident.
- q. Emergency Procedures for the terminal, developed in conjunction with the Port Authority and the Emergency Services, shall be in place before any explosives are handled.
- r. A Traffic Management Plan for the Port Operational Area shall be in place for road vehicles carrying explosives.
- s. Road vehicles carrying explosives (Excluding Division 1.4) shall be at least 100 meters apart while waiting to load a vessel and/or waiting to leave the Port Operational Area.
- t. Whilst explosives are being handled, ignition sources shall not be permitted in or near handling areas, smoking shall be strictly prohibited on the vessel and on the berth (Except in safe areas). Notices shall be displayed on the vessel and on the berth bearing the words DANGER - NO SMOKING - NO NAKED LIGHTS.
- u. Adequate and appropriate firefighting facilities and water shall be immediately available on the vessel and fire hoses on it laid out ready for use (Not applicable to Division 1.4 explosives).
- v. Vessel and shore personnel shall receive prior instruction regarding the hazards, handling methods and emergency procedures for explosives.
- w. Repairs involving hot work shall be prohibited on the vessel or on the berth whilst explosives (Excluding Division 1.4) are being transported or handled.
- x. Repairs involving engine repairs resulting in the vessel being immobilised are prohibited whilst explosives are on board the vessel (Excluding Division 1.4).

- y. No bunkering shall take place while explosives are being loaded or unloaded.
- z. Explosives shall be segregated from incompatible cargoes, combustibles and other dangerous cargoes at all times.
- aa. The vessel's engines and ancillary equipment shall be kept ready at all times, so that the vessel can leave the berth at short notice.

Additional Requirements for Port Botany Only

- bb. If the maximum NEQ quantities, as specified in Table 4 are to be exceeded, then following additional conditions ("cc" to "ii") apply at Port Botany.
- cc. Checklist Forms 1.4, 1.5, 1.6, 1.7, 1.8, 1.9 and 1.10 are to be completed (See "a" above).
- dd. When the minimum separation distances stipulated in Table 4 are encroached upon, the above forms (as listed in "a") must also to be completed.
- ee. The maximum NEQ quantities stipulated in Table 4 are to be exceeded only with the prior approval of the Port Authority (Prior to the explosives being loaded on the vessel at the load port). The minimum separation distances must be maintained at all times.
- ff. When the explosive NEQ quantities stipulated in Table 4 are to be exceeded, the maximum NEQ permitted shall be stipulated in writing by the Port Authority.
- gg. Export explosives exceeding the standard limits are not to be received at the Port Operational Area until a check in **ShIPS** confirms that no other vessel movements are scheduled within the next two hours from the time the export explosives are to be received at the Port Operational Area.
- hh. A vessel carrying import explosives exceeding the standard limits shall not be received at the Port Operational Area where a vessel movement is scheduled in **ShIPS** while the explosives remain on board the vessel.
- ii. When exporting explosives, the terminal operator shall notify VTS by email as soon as the explosives enter the Port Operational Area at vts@portauthoritynsw.com.au.

3.7 Additional Requirements for Packing Group I and Restricted DG Class 5.1 Oxidising Substances

3.7.1 Introduction

Quantity limits and additional safety requirements apply for DG Class 5.1 Packing Group I (PG 1) oxidising substances, Ammonium Nitrate (UN No.'s 1942, 2067, 2426 and 3375); and Calcium Hypochlorite (UN No.'s 1748, 2880, 3485 and 3487).

3.7.2 Quantity Limits for DG Class 5.1 Packing Group I Oxidising Substances, Ammonium Nitrate or Calcium Hypochlorite

The maximum quantity of DG Class 5.1 PG 1 oxidising substances to be handled at any one time at an ordinary berth shall not exceed **400 tonnes**.

The maximum aggregate quantity of Ammonium Nitrate (UN No.'s 1942, 2067, 2426 and 3375) or Calcium Hypochlorite (UN No.'s 1748, 2880, 3485 and 3487) to be handled at any one time at an ordinary berth shall not exceed:

- **400 tonnes** when in approved freight container units, or
- **150 tonnes** when non-containerised in other packaging (including loose IBCs).

At Port Botany, Newcastle and Port Kembla, an additional quantity of Ammonium Nitrate or Calcium Hypochlorite not exceeding 1000 tonnes may be conveyed on a vessel at an ordinary berth as transit cargo (i.e. cargo remaining on board). Such quantities shall be packed in freight containers, flexible bulk containers or other packaging, or packed in bulk in a freight container.

The maximum quantity of Calcium Hypochlorite per shipping container must not exceed 14 tonnes.

Table 5 Quantity Limits for DG Class 5.1 PG I Oxidising Substances, Ammonium Nitrate or Calcium Hypochlorite

Berth (Note A)	Type of Berth	Maximum Quantity of Class 5.1 PG I Oxidising Substances	Maximum Aggregate Quantity of Ammonium Nitrate or Calcium Hypochlorite		Additional Quantity of Ammonium Nitrate or Calcium Hypochlorite as Transit Cargo (tonnes)
			In Approved Freight Container Units (tonnes)	Non-Containerised in Other Packaging (tonnes)	
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
PORT BOTANY					
1 HD	Ordinary	400	400	150	1000
2 HD	Ordinary	400	400	150	1000
6 BD	Ordinary	400	400	150	1000
7 BD	Ordinary	400	400	150	1000
8 BD	Ordinary	400	400	150	1000
9 BD	Ordinary	400	400	150	1000
10 BD	Ordinary	400	400	150	1000
11 BD	Ordinary	400	400	150	1000
12 BD	Ordinary	400	400	150	1000
PORT KEMBLA					
104	Ordinary	400	400	150	1000
105	Ordinary	400	400	150	1000
106	Ordinary	400	400	150	1000
107	Ordinary	400	400	150	1000
202	Ordinary	400	400	150	1000
203	Ordinary	400	400	150	1000
PORT OF NEWCASTLE					
EB1	Ordinary	400	400	150	1000
EB2	Ordinary	400	400	150	1000
K2	Special	400	3000		-
K3	Special	400	3000		-
M4	Special	400	-	6500	-
WB3	Ordinary	400	400	150	1000
WB4	Ordinary	400	400	150	1000

Notes to Table 5:

- A. No berth other than those listed in Table 5, (Column 1) has approval for handling Packing Group I or Restricted DG Class 5.1 oxidising substances.

3.7.3 Safety Requirements for Packing Group I Oxidising Substances, Ammonium Nitrate or Calcium Hypochlorite

The following additional safety requirements apply to the handling and transport of DG Class 5.1 Packing Group I (PG I) oxidising substances, Ammonium Nitrate and/or Calcium Hypochlorite in Port Operational Areas:

- These chemicals must be packed, stowed, segregated and handled in accordance with the IMDG Code.
- Bulk cargoes of Ammonium Nitrate are to be handled in accordance with the requirements of the *International Maritime Solid Bulk Cargoes (IMSBC) Code* issued by the International Maritime Organization (current at the relevant time).
- Port Authority may require that any cargo space in which Ammonium Nitrate, Calcium Hypochlorite or DG Class 5.1 PG 1 goods is stowed, but not intended to be unloaded, remains closed while the vessel is at the berth. Any vessel carrying these goods are to advise and seek direction from Port Authority at least 24 hours prior to the vessel entering the Port Operational Area and preferably prior to the goods being loaded.
- Emergency Procedures for the terminal, reviewed by Port Authority and the Emergency Services, shall be in place before any Ammonium Nitrate or Calcium Hypochlorite is handled.

Additional Requirements for Handling Ammonium Nitrate or Calcium Hypochlorite at a Special Berth

- The master of a vessel carrying a cargo of Ammonium Nitrate and/or Calcium Hypochlorite must ensure that the cargo is handled by the vessel's crew while it is on the vessel in accordance with the requirements of Section 6.6 of AS 3846.
- A Terminal Operator handling a cargo of Ammonium Nitrate and/or Calcium Hypochlorite must ensure that the cargo is handled in accordance with the requirements of Section 6.6 of AS 3846.

3.8 Additional Requirements for DG Class 7 Radioactive Materials

3.8.1 Introduction

All DG Class 7 Radioactive Materials are **RED** line cargoes (refer to Section 3.4.1), except for DG Class 7 Low Specific Activity (LSA) substances, which are **AMBER** line cargoes (Refer to Section 3.4.2).

Safety requirements for all DG Class 7 Radioactive Materials (including LSA substances) are included in Section 3.8.2. Additional safety requirements apply if an exemption is granted by the Port Authority (in writing) for LSA substances to exceed the 12-hour time limit for **AMBER** line cargoes. These additional requirements are included in Section 3.8.3.

Segregation requirements for all DG Class 7 Radioactive Materials (including LSA substances) are included in Section 3.8.4.

3.8.2 Safety Requirements for DG Class 7 Radioactive Materials

All DG Class 7 Radioactive Materials must be packaged and handled in accordance with the *Code of Practice for the Safe Transport of Radioactive Material (RPS 2)* and stowed, packaged and handled in accordance with the *IMDG Code*.

Exposure to cargoes with DG Class 7 Radioactive Materials must be managed in accordance with the requirements of Section 7.3 of AS 3846.

A cargo with DG Class 7 Radioactive Materials must be handled in the Port Operational Area in accordance with the requirements of Section 7.7 of AS 3846.

Incidents involving DG Class 7 Radioactive Materials in the Port Operational Area must be managed in accordance with the requirements of Section 7.8 of AS 3846.

3.8.3 Additional Requirements for DG Class 7 LSA Substances

If an exemption is granted by the Port Authority (in writing) for LSA substances to exceed the 12-hour time limit for **AMBER** line cargoes, then the following additional requirements apply:

- The facility Emergency Management Plan must be amended in line with the International Atomic Energy Agency's (IAEA's) Safety Guide: *Planning and Preparing for Emergency Response to Transport Accidents Involving Radioactive Material*.
- The total Transport Index (TI) for each freight container must not exceed 50. Anything exceeding 50 would be treated as RED LINE cargo.
- A clear distance of 6 m shall be maintained between stacks of packages or freight containers and a separation distance of at least 6 metres applies for all 'yellow label' consignments.
- All radioactive materials must be separated from workers and from members of the public and unauthorised access to the storage area must be prohibited.
 - Operation of the storage area must comply with the requirements in Section 7.5.6 of AS3846.
 - Stacks of packages or freight containers shall be located so they are at least 13 m from rest room, offices or any other places where people are likely to be present.
 - Packages or freight containers with 'yellow label'radioactive materials must be separated from any place frequented by persons by at least the distances given in Table 6.

Table 6 Separation Distance from ‘Yellow Label’ Packages or Freight Containers to Places Frequented by People

Sum of Transport Indices	Minimum Separation Distance (metres)
<5	4
>5 to <10	6
>10 to <20	8
>20 to <30	10
>30 to <40	12
>40 to <50	13
>50 to <100	18
>100 to <150	22
>105 to <200	26

3.8.4 Segregation of DG Class 7 Radioactive Materials

DG Class 7 Radioactive Materials are **RED** or **AMBER** line cargoes (Refer to Sections 3.4.1 and 3.4.2). **RED** line cargoes should only be present in the Port Operational Area for direct shipment or delivery and **AMBER** line cargoes are to be isolated on the wharf before being removed with 12 hours. In these cases, goods considered to be incompatible with DG Class 7 Radioactive Materials should be segregated in accordance with the requirements in Chapter 9.2 of the Australian Code for the Transport of Dangerous Goods by Road & Rail.

The goods listed in Table 7 are considered to be incompatible with DG Class 7 Radioactive Materials if any of the following conditions are met:

- The primary hazard of one is incompatible with the primary hazard of the other;
- The primary hazard of one is incompatible with a subsidiary risk of the other; or
- A subsidiary risk of one is incompatible with a subsidiary risk of the other.

Table 7 Dangerous Goods Compatibility with Radioactive Material

Class	1	2.1	2.2	2.3	3	4.1	4.2	4.3	5.1	5.2	6	7 (1)	8	9	Food or Food Empties	Fire-risk Substance/s or Combustible Material/s
Radio-active Material	N	N	O	O	N	N	N	N	N	N	O	O	N	O	N	O

Legend:

- O means compatible unless a numbered exception applies.
- N means incompatible unless a numbered exception applies.

Exceptions:

1. *Radioactive material must be sufficiently segregated from undeveloped photographic film. The basis for determining segregation distances for this purpose shall be that the radiation exposure of undeveloped photographic film due to the transport of radioactive material be limited to 0.1 mSv per consignment of such film.*

3.9 Additional Requirements for Bulk Dangerous Goods

3.9.1 Introduction

Bulk DGs are typically **AMBER** line cargoes (Refer to Section 3.4.2) or **GREEN** line cargoes (Refer to Section 3.4.3) and include bulk liquid and bulk solid cargoes.

Additional safety requirements apply for bulk DGs in Port Operational Areas (Refer to Section 3.9.2).

3.9.2 Safety Requirements Requirements

for Masters of Vessels

- The master of a vessel carrying a cargo of bulk liquid DGs must ensure that the cargo is handled by the vessel’s crew while it is on the vessel in accordance with the requirements of Section 8 of AS 3846 concerning the handling of such cargoes on a vessel.
- The master of a multipurpose carrier (within the meaning of AS 3846) carrying bulk DGs must ensure that the requirements of Appendix P of AS 3846 and the *IMDG Code* concerning the handling of such cargo on a vessel are complied with.

- The master of a vessel carrying a cargo of bulk solid DGs must ensure that the cargo is handled by the vessel's crew while it is on the vessel in accordance with the requirements of Section 9 of AS 3846 concerning the handling of such cargoes on a vessel.

Requirements for Terminal Operators

- A Terminal Operator handling a cargo of bulk liquid DGs must ensure that the cargo is handled in accordance with the requirements of Section 8 of the AS 3846 concerning the handling of such cargoes in or on terminals.
- A Terminal Operator handling flammable bulk liquid DGs must comply with any requirements imposed by law with respect to the handling of such goods, including the requirements of Appendix G of AS 3846 with respect to the handling of such goods, and the requirements of clause 10.5 of AS 3846 with respect to developing a risk assessment for firefighting resources.

3.10 Notice to Remove Dangerous Goods

Port Authority may issue a notice to remove DGs from the Port Operational Area if the provision of these guidelines and/or any legislation has been contravened.

4 Dangerous Goods Incidents

4.1 Notification of Dangerous Goods Incidents

4.1.1 Notification of DG Incidents on a Vessel Prior to Arrival at a Port in NSW

It is the responsibility of the Vessel's Master to ensure a system is in place for notification and response to incidents involving DGs on a vessel prior to its arrival at a Port in NSW. This may require providing notifications to the Terminal Operator, relevant leaseholder, Government Agencies and/or emergency services prior to the vessel's arrival.

Depending on the circumstances, the vessel may need to be berthed at a particular location or entry of the vessel into the Port Operational Area may need to be refused. To enable these decisions to be made, it is critical that the substances involved are identified as quickly as possible.

The incident must be reported to the relevant Port Authority contact as soon as possible after becoming aware of the incident. The relevant Port Authority contacts are as follows:

- **Port Botany** – dgaudit@portauthoritynsw.com.au
- **Port Kembla** – pk_portoperations@portauthoritynsw.com.au.
- **Port of Newcastle** – nc_vtic@portauthoritynsw.com.au

Note: It should also be ensured that a customs clearance (not an under bond move) is in place prior to the vessel entering port waters in NSW.

Note: If the vessel declaration has already been completed before becoming aware of an incident, then the vessel operator and/or agent must immediately amend the vessel declaration and nominate the relevant container and/or associated issue.

After the container has been identified, the identification of the substances inside the container will be determined by the Port Authority by accessing the relevant electronic notification system (Refer to Section 2.1) and viewing the DG cargo details. Once the contents have been identified, a plan will then be activated to manage the incident.

4.1.2 Notification of DG Incidents during Transport by Road or Rail

If a package or container in which DGs are stored is leaking, damaged or emitting a gas before or while the goods are being delivered to a terminal of a port by road or rail, then it is the responsibility of the Terminal Operator to ensure a system is in place for notification and response to this incident. This includes providing notifications to the relevant leaseholder, Government Agencies and emergency services.

The relevant Port Authority contact must also be notified as soon as possible after the Terminal Operator is made aware of the incident (Refer to Section 4.1.1).

4.1.3 Notification of DG Incidents in the Port Operational Area

If a package or container in which DGs are stored is leaking, damaged or emitting a gas while in or on a terminal of a port, then it is the responsibility of the Terminal Operator to ensure a system is in place for notification and response to this incident. This includes providing notifications to the relevant leaseholder, Government Agencies and emergency services.

The relevant Port Authority contact must also be notified as soon as possible after the Terminal Operator is made aware of the incident (Refer to Section 4.1.1).

4.2 Response to Dangerous Goods Incidents

The person responsible for notifying a DG incident (other than an incident involving radioactive goods) must, as soon as possible after the incident is discovered, ensure that:

- any spillage or leak concerned is contained and secured; and
- appropriate specialist advice to address the incident is obtained.

The person responsible for notifying a DG incident involving radioactive goods must ensure that:

- all steps are taken to avoid contact with, or inhalation of, radioactive substances.
- each of the following are immediately notified of the incident:
 - the Environment Protection Authority.
 - the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA).
 - the owner of the radioactive goods.
- the spillage or leak concerned is cleaned up immediately by properly equipped and trained personnel.
- Other persons are excluded from the site of the spillage or leak until such time as the Environment Protection Authority declares the site to be safe.

5 Dangerous Goods Exemptions

5.1 Introduction

Port Authority is the approving authority for DGs in a Port Operational Area. Therefore, DG exemptions are ONLY valid when confirmation has been obtained from the Port Authority in writing.

Currently, the following exemptions are permitted for ports in NSW:

- a) Notification requirements for DGs prior to arrival at a Port Operational Area; and,
- b) Extension of permitted time limits for DGs within the Port Operational Area.

A dispensation may also be granted for transit of DGs through a non-DG berth if safety measures have been agreed and put in place by the berth Owner, operator and stevedores.

Exemptions are not issued for **RED** line cargoes. In Port Botany exemptions are not issued for **AMBER** line cargoes as well.

	RED	AMBER	GREEN
PORT BOTANY	No Exemptions	No Exemptions	Application for exemption with risk assessment required for review by PANSW
PORT KEMBLA	No Exemptions	Application for exemption with risk assessment required for review by PANSW	Application for exemption with risk assessment required for review by PANSW
PORT OF NEWCASTLE	No Exemptions	Application for exemption with risk assessment required for review by PANSW	Application for exemption with risk assessment required for review by PANSW

The application may be approved subject to the applicant's risk assessment and additional measures lodged and reviewed. A reply, with reasons for acceptance or rejection of an Exemption Application, will be forwarded to the applicant.

Any application for an exemption from the requirements of these guidelines will be dealt with on a "one-off" basis. The Port Authority will not consider any retrospective exemption application.

Exemption instructions are included in Sections 5.2 and 5.3 for each port. For more information, the relevant Port Authority contacts are as follows:

- **Port Botany** – vts@portauthoritynsw.com.au
- **Port Kembla** – pk_portoperations@portauthoritynsw.com.au or mail to the attention of the Harbour Master or Marine Operations Manager
- **Port of Newcastle** – nc_vtic@portauthoritynsw.com.au

5.2 Notification of Dangerous Goods Cargoes

5.2.1

Introduction

Port Authority will consider the following factors when reviewing an application for exemption from the 24-hour notification requirement:

- (a) The applicant's prior record of DG notifications, which will include on how many occasions the applicant has requested an exemption and the period of time since the last exemption.
- (b) Why the DGs notification was not undertaken at the same time as seeking approval from the shipping line.
- (c) A sea voyage of less than 24 hours duration.

5.2.2 Port Botany

Import & Transshipment Cargo

- Apply for your DG exemption online in ShIPS.
- Indicate why you are seeking an exemption from the notification criteria (time requirements).
- The Port Authority will process the DG exemption application after receiving the application in **ShIPS** and will advise you of the determination by e-mail when your exemption application has been processed.

An application with the Stevedore (Terminal Operator) is required for their concurrence under these circumstances.

Transit Cargo

- Apply for your DG exemption online in **ShIPS** by selecting the button “Create Transit Exemption”.
- Select the button “Apply for exemption” and fill in the reason for your application.
- Port Authority will process the DG exemption application after receiving the application in **ShIPS** and will advise you of the determination by e-mail when your exemption application has been processed.

There is no need to apply with the Stevedore (Terminal Operator) for their concurrence under these circumstances.

Export Cargo

- Apply for your DG exemption online in ShIPS
- Indicate why you are seeking an exemption from the notification criteria (time requirements)
- Provide your time slot and slot reference number
- Port Authority will process the DG exemption application after receiving the application in **ShIPS** and will advise you of the determination by e-mail (automated by ShIPS) when your exemption application has been processed
- Vessel delay notification sent by the agent of the vessel

An application with the Stevedore (Terminal Operator) is required for their concurrence under these circumstances.

5.2.3 Port Kembla

Import, Transshipment, Transit & Export Cargo

- Apply for your DG exemption by email to the Port Authority of NSW Port Kembla: pk_portoperations@portauthoritynsw.com.au
- Indicate why you are seeking an exemption from the notification criteria.

- Port Authority will process the DG exemption application after receiving the application in writing/email and will advise you of the determination by e-mail when your exemption application has been processed.

There is no need to apply with the Stevedore (Terminal Operator) for their concurrence under these circumstances. The Port Authority will engage with the terminal operator to determine their acceptance of the additional risks.

5.2.4 Port of Newcastle

Import, Transshipment, Transit & Export Cargo

- Apply for your DG exemption by email to the Port Authority of NSW - Newcastle: nc_vtic@portauthoritynsw.com.au
- Indicate why you are seeking an exemption from the notification criteria.
- Port Authority will process the DG exemption application after receiving the application in writing/email and will advise you of the determination by e-mail when your exemption application has been processed.

An application with the Stevedore (Terminal Operator and the licensee) is required for their concurrence under these circumstances.

5.3 Extension of Permitted Time Limit

5.3.1 Port Botany

Regardless of what hold has been placed on the goods (Customs, AIS, shipping line and/or stevedore), an application for an exemption from the permitted time period on the terminal must be submitted prior to exceeding the permitted time period.

Extension of Permitted Time Limit

- Discuss directly with the Stevedore (Terminal Operator), if the DG exemption request can be accommodated.
 - All three Stevedores require the exemption application to be in writing and the DG application templates for exemptions from the permitted time period on the terminal are available at:
<https://www.portauthoritynsw.com.au/>
The exemption application will only be processed by the Stevedore, using a DG application template.
 - You will need to complete the application template and then email your completed application to the appropriate Stevedore. Please ensure that all the fields on the template are completed as incomplete data fields will only result in your application being returned to you for completion and therefore adding delays.
 - Only proceed to the next step after receiving confirmation from the Stevedore.

- Once you have reached an agreement with the Stevedore, apply to the Port Authority for your DG exemption online in ShIPS.
- The Stevedore will also advise the Port Authority by email of the agreement reached.
- Port Authority will process the DG exemption application after receiving:
 - a) A confirmation email from the Stevedore with the agreement details, and
 - b) An application in ShIPS.
- The Port Authority will advise you of the determination of your DG exemption application by email.

Do not copy the Port Authority into your application for a DG exemption when applying to the Stevedore for their concurrence. However, when receiving advice from the Stevedore on your DG exemption application, please ensure that Port Authority is also notified prior to going online in “ShIPS” and making your DG exemption application.

Vessel Delay Notification

If you receive a notification of the vessel being delayed when you already have an approved exemption from the permitted time period:

- In a new exemption application only apply for the time period of the vessel delay.
- This time period in the new application will be added onto your existing exemption and therefore your combined exemption period is then covered.
- When receiving an email advice from the shipping line via **ShIPS** regarding a vessel change in the ETA and/or ETD. Only apply directly on line in **ShIPS** for any dangerous goods exemptions where applicable from the permitted time period on the terminal.

There is no need to apply with the Stevedore (Terminal Operator) for their concurrence under these circumstances.

5.3.2 Port Kembla

Where you are seeking consent for the DGs to exceed the permitted time allowance in the Terminal:

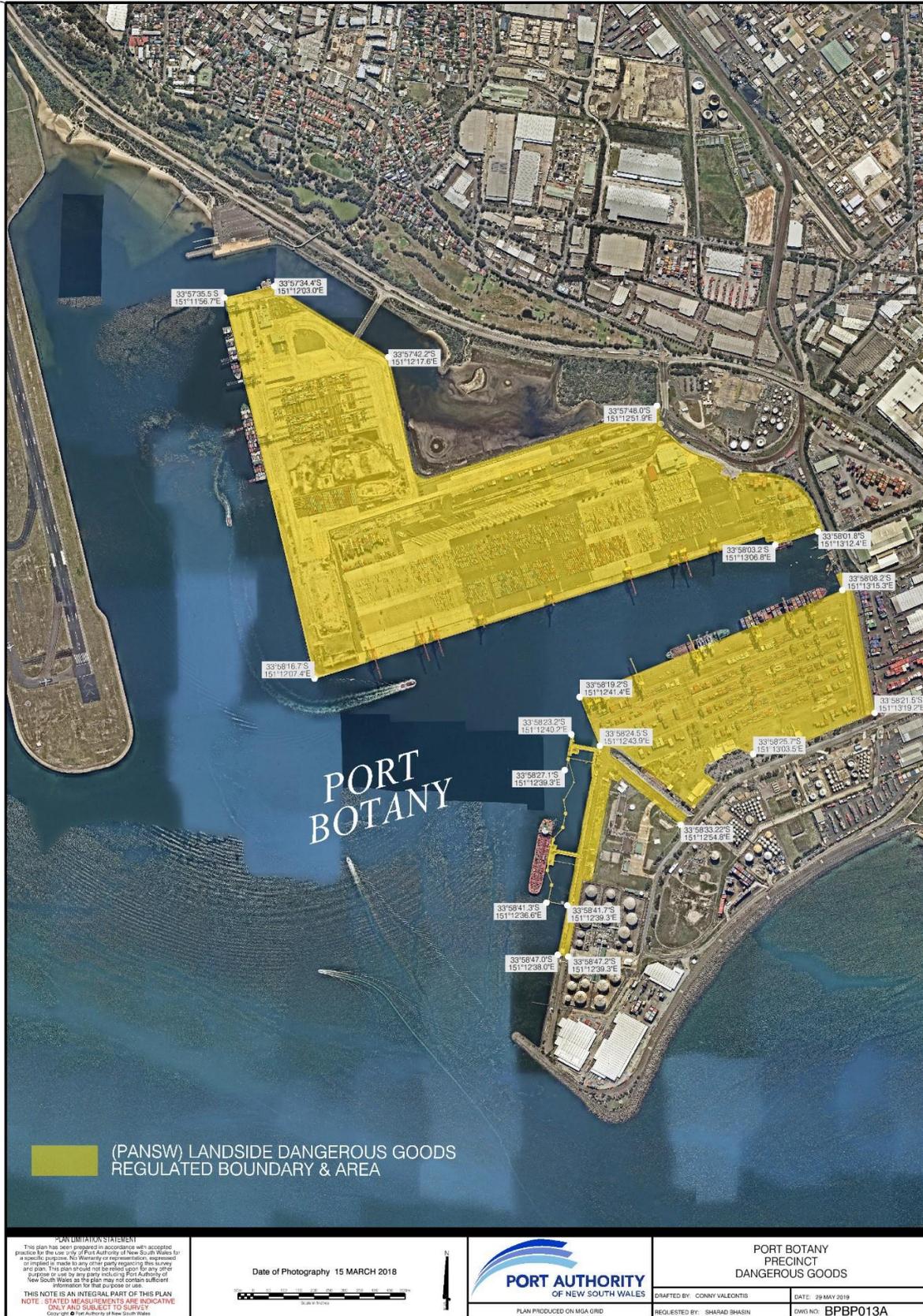
- Discuss directly with the Terminal Operator, if the DG exemption request can be accommodated by them.
- After reaching agreement with the Terminal Operator, apply for a DG exemption from the Port Authority by email to: pk_portoperations@portauthoritynsw.com.au
- The Terminal Operator will also advise Port Authority by email of the agreement reached.
- Port Authority will process the application and will advise you of the determination of your DG exemption application by email.

5.3.3 Port of Newcastle

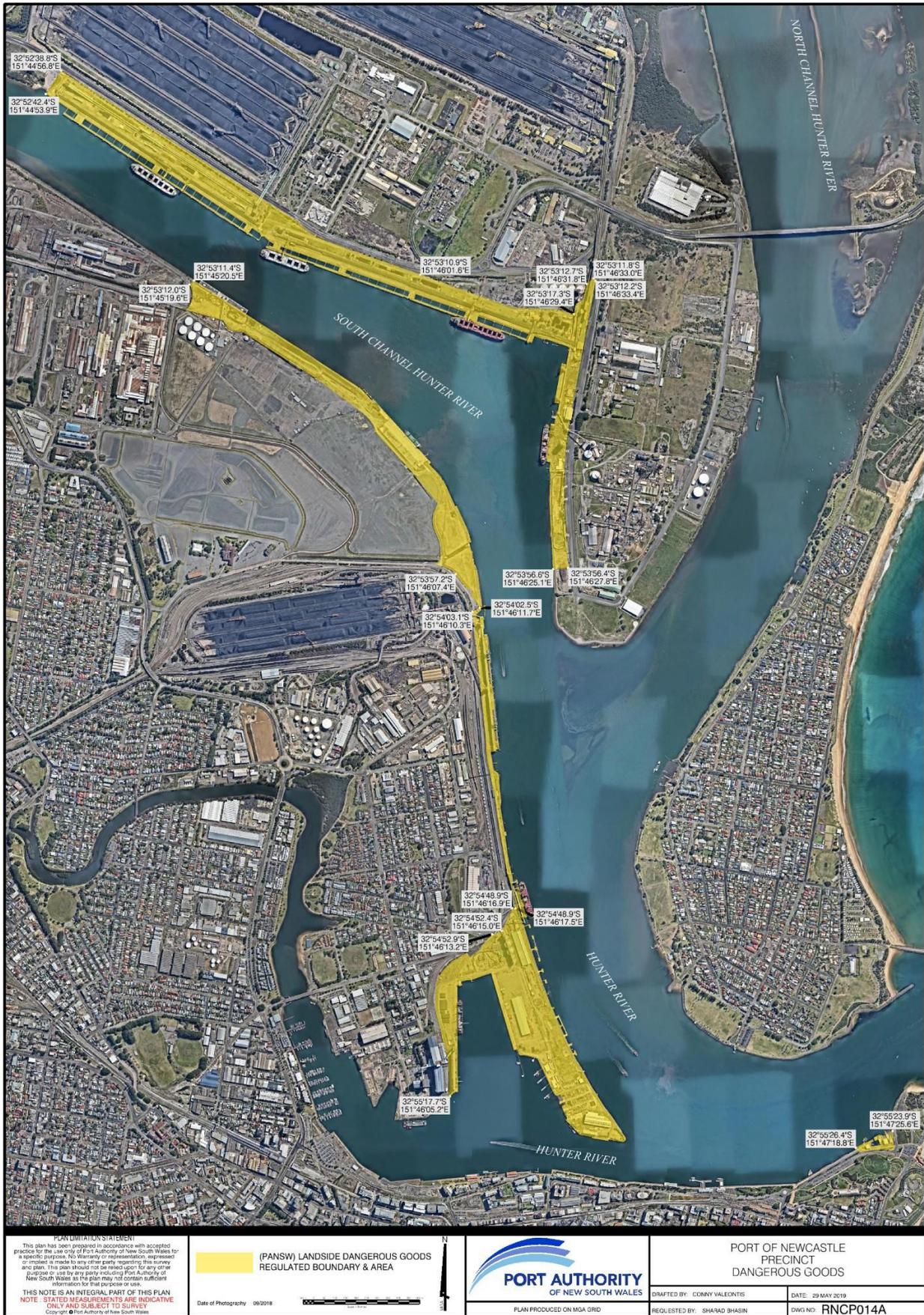
Where you are seeking consent for the DGs to exceed the permitted time allowance in the Terminal:

- Discuss directly with the Terminal Operator, if the DG exemption request can be accommodated by them.
- After reaching agreement with the Terminal Operator and the Licensee, apply for a DG exemption from the Port Authority by email to: nc_vtic@portauthoritynsw.com.au
- The Terminal Operator will also advise Port Authority by email of the agreement reached.
- Port Authority will process the application and will advise you of the determination of your DG exemption application by email.

Appendix A Port Operational Areas







Appendix B Segregation of Closed Containers Carrying DGs

The following table is only applicable for DGs in closed containers, portable tanks, or closed road vehicles whilst onshore within the Port Operational Area (i.e. onshore at the wharf or in the terminal). For other types of packaging, the relevant Port Authority should be contacted to determine the segregation requirements.

The following table is not applicable for DGs on board a vessel or for transport of DGs by road or rail. DGs on board the vessel should be segregated in accordance with the *IMDG Code*. DGs loaded onto vehicles should be segregated in accordance with the relevant requirements for transport of DGs in NSW (e.g. *Australian Code for the Transport of Dangerous Goods by Road & Rail*, *Code of Practice for the Safe Transport of Radioactive Material*, etc.).

Segregation requirements are not included in the following table for Class 1 (Other than Class 1.4), Class 6.2 and Class 7 DGs. These cargoes should only be present in the Port Operational Area for direct shipment or delivery only. If, through unforeseen circumstances, these cargoes have to be temporarily kept in the Port Operational Area, then the relevant Port Authority should be contacted to determine the segregation requirements.

Segregation should take account of a single subsidiary risk label. Where segregation is required, containers must not be stored in the same vertical line.

DG Class		1.4	2.1	2.2	2.3	3	4.1	4.2	4.3	5.1	5.2	6.1	8	9
Explosives	1.4	*	S	O	O	S	S	S	S	S	S	O	S	O
Flammable gases	2.1	S	O	O	O	S	O	S	O	S	S	O	O	O
Non-flammable, non-toxic gases	2.2	O	O	O	O	O	O	O	O	O	O	O	O	O
Toxic Gases	2.3	O	O	O	O	S	O	S	O	O	S	O	O	O
Flammable Liquids	3	S	S	O	S	O	O	S	O	S	S	O	O	O
Flammable solids, self-reactive substances and solid desensitised explosives	4.1	S	O	O	O	O	O	O	O	O	S	O	O	O
Substances liable to spontaneous combustion	4.2	S	S	O	S	S	O	O	O	S	S	O	O	O
Substances which, in contact with water, emit flammable gases	4.3	S	O	O	O	O	O	O	O	S	S	O	O	O
Oxidizing Substances	5.1	S	S	O	O	S	O	S	S	O	S	O	S	O
Organic Peroxides	5.2	S	S	O	S	S	S	S	S	S	O	O	S	O
Toxic substances	6.1	O	O	O	O	O	O	O	O	O	O	O	O	O
Corrosive substances	8	S	O	O	O	O	O	O	O	S	S	O	O	O
Miscellaneous dangerous substances and articles	9	O	O	O	O	O	O	O	O	O	O	O	O	O

*	Refer to Section 7.2.7.1 of the IMDG Code for segregation within Class 1.
O	No segregation is required; however, the individual schedules of the IMDG Code should be consulted.
S	In open areas, 3 metre separation required. In sheds, 6 metre separation required.