

# Dangerous Goods

## Port Notice

### PN/003

***Work Safe. Live Safe.***

## VERSION CONTROL

VERSION	DATE	POSITION	NAME	REASON FOR CHANGE
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## SECTION 1: INTRODUCTION

### 1.1. Reference Documentation and Legislation

The following documents were referenced in developing this Port Notice.

#### International

- The Revised Recommendations on the safe transport of dangerous cargoes and related activities in port areas published by the International Maritime Organisation (*IMO Recommendations*)
- International Maritime Dangerous Goods Code 2018 (*IMDG Code*)

#### National

- Marine Order 41 (Carriage of Dangerous Goods) 2017
- AS 3846-2005 The handling and transport of dangerous cargoes in port areas
- The Australian Dangerous Goods Code (*ADG Code*)
- Code of Practice: Safe Transport of Radioactive Material 2008 published by ARPANSA (*ARPANSA Code*)
- The Australian Code of Transport of Explosives by Road and Rail (3<sup>rd</sup> Edition)

#### Northern Territory

- *Ports Management Act 2015 (NT)*
- *Dangerous Goods Act 1998 (NT)*
- *Dangerous Goods Regulations 1985 (NT)*
- *Marine Act 1981 (NT)*
- *Radioactive Ores and Concentrates (Packaging and Transport) Act 1980 (NT)*

### 1.2. No release of liability

Nothing in this Port Notice relieves the consignor (shipper) or anyone else involved in the handling of dangerous goods of their responsibility under International, Commonwealth and Northern Territory legislation and requirements.

Notification to the Darwin Port Operator in accordance with this Port Notice does not relieve a consignor of their obligation to notify the competent authority or other relevant authority or organisation and does not constitute approval by the competent authority to ship dangerous goods.

### 1.3. Authority

This Port Notice is issued pursuant to Section 57 of the Ports Management Act 2015 (NT).

### 1.4. Scope

This Port Notice applies to the transport and handling of dangerous goods within the gazetted port limits of Darwin. Figure 1 illustrates the port limits of Darwin.

This Port Notice does not apply to Department of Defence Commonwealth Explosives transfers at Department of Defence facilities, designated anchorages, the East Arm Multi User Barge Ramp (MUBR) or the Submarine Buoy.

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## 1.5. Definitions

**Bulk** means cargoes that are intended to be carried without any intermediate form of containment, in a cargo space that is a structural part of a ship, or in a tank permanently fixed in or on a ship.

**Dangerous Goods** means any dangerous goods as defined in the IMDG Code, as amended from time to time. **Dangerous Cargoes** has a corresponding meaning.

**Fort Hill Wharf East** is defined as to the east of metre mark 140 (metre marks less than 140).

**Fort Hill Wharf West** is defined as to the west of metre mark 140 (metre marks greater than 140).

**Green Line Cargo** is defined as cargo that is permitted to remain within the Port Area for up to 5 days. This is based on AS 3846-2005 and is subject to Port Operator approval and operational requirements on the wharf.

**Port Area**, as used in AS 3846-2005, means the Port of Darwin.

**Port of Darwin** means the port of Darwin as defined in the Northern Territory Government Gazette No S73 of 1 July 2015.

**LSA** means radioactive material which by its nature has a limited specific activity or radioactive material for which limits of estimated average specific activity apply.

**NEQ** means the mass of explosive material contained in an explosive substance without packaging or casings.

**Ordinary Berth** means a berth where ships with general cargo operate, and which is not a special berth.

**Packing Group** means 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 as follows;

- I. High Danger
- II. Medium danger
- III. Low danger

**Proper Shipping Name** means the entry specified in the IMDG Code, that is the entry that most accurately describes the goods in table A in Chapter 3.2. of the IMDG Code

**Protected Place** is defined as the following;

- A dwelling, place of worship, public building, school or college, hospital, theatre or any building or open area in which persons are accustomed to assembling, whether within or outside the port area.
- A factory, workshop, office, store, warehouse, shop or building where people are employed that is outside the boundary of the site where the dangerous goods or cargoes are handled.
- A vessel lying at permanent berthing facilities.
- Any storage facility for dangerous goods or cargoes that is outside the property area of the port area.

**Red Line Cargo** is defined as cargo not permitted to remain within the Port Area for greater than twelve hours. Cargoes covered by this are outlined in Section 3

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**SCO** means a solid object that is not itself radioactive but that has radioactive material distributed on its surfaces.

**Ship** (in the context of this Port Notice) means any seagoing or non-seagoing water craft used for the transport of dangerous cargoes.

**Ship's Stores** mean materials which are on board a ship for the upkeep, maintenance, safety, operation or navigation of the ship (except for fuel and compressed air used for the ship's primary propulsion machinery or for the fixed auxiliary equipment) or for the safety or comfort of the ship's passengers or crew. Materials which are intended for use in commercial operations by a ship are not considered to be ship's stores.

**Special Berth** is defined as a berth sufficiently separated, controlled and specifically designated for handling dangerous cargoes.

**Transport Index** in relation to Class 7 radioactive Dangerous Goods means a single number assigned to a package, over pack, tank or freight container, or to unpackaged LSA-I or SCO-I material, which is used to provide control over both nuclear criticality safety and radiation exposure.

**Vehicle** is defined as a truck, car or train whilst moving under its own power, transporting dangerous goods.

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## SECTION 2: NOTIFICATION

### 2.1. Required Notification

The Darwin Port Operator requires a minimum of forty-eight (48) hours notification of dangerous goods entering the Port of Darwin including;

- Load
- Unload
- Transit

Notification is not required for ship's stores.

All dangerous goods notifications are to be submitted to [dangerousgoods@darwinport.com.au](mailto:dangerousgoods@darwinport.com.au) in accordance with this Port Notice.

Where a dangerous goods notification has been submitted and an amendment is required, the update must be submitted prior to the entry of the Dangerous goods into the port area.

**Note 1:** Darwin Marine Supply Base (DMSB) also has dangerous goods reporting requirements in place, refer DMSB Handbook at - [http://www.ascoworld.com/sites/default/files/documents/dmsb\\_handbook - final 1.2.2016-2.pdf](http://www.ascoworld.com/sites/default/files/documents/dmsb_handbook_-_final_1.2.2016-2.pdf) for further information.

**Note 2:** The Port Operator may reduce the notification period to 24 hours for dangerous goods being loaded in Darwin for an intra-state voyage provided the dangerous goods do not exceed the relevant time limit in Table 3.

Due to reduced passage times, dangerous goods notifications will be accepted and acknowledged from rig tenders that are engaged in the servicing of oil and gas facilities and permit areas in the Bayu Undan, Blacktip, Barossa, Heron and Blackwood fields, a minimum of 18 hours prior to the vessel entering the Port of Darwin.

### 2.2. Failure to Notify

If the required notification is not provided, ships may be refused entry.

### 2.3. Packaged Dangerous Goods

For packaged dangerous goods the notification must be submitted in the form in a properly completed Dangerous Goods Notification in the form in Annex A.

A detailed description of the packaging or freight container must be included to allow for an assessment of the risk of a spill and if an appropriate spill kit is available.

The Darwin Port Operator is not obliged to accept an incomplete Dangerous Goods Notification.

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## 2.4. Infectious Substances

Class 6.2 Infectious Substances are not normally conveyed through the port area. Class 6.2 will be considered on a case by case basis and requires a written application outlining the following;

- UN Number
- Proper Shipping Name
- Microorganism Name
- IMDG Code Category
- Packaging description
- MSDS
- Transport Plan
- Emergency Management and
- Spill Response Plan

The application must be submitted a minimum 96 hours in advance of the dangerous good arriving in the port area to allow for a risk assessment and approval by the Port Operator in its sole and absolute discretion.

## 2.5. Bulk Dangerous Goods

A Dangerous Goods Application – Bulk must be submitted in the form in Annex B for Bulk Dangerous Goods.

## 2.6. Liquid Natural Gas (LNG) Ships

LNG ships loading cargo within the Port of Darwin must, in addition to the Dangerous Goods Notification form, submit the LNG Questionnaire 48 hours prior to entering Port Limits. The LNG Questionnaire is at Annex C.

## 2.7. Transferring Small Arms and Light Weapons

A minimum of one working days' notice is required for the transfer of small arms. The shipper is responsible for all security aspects of the transfer. Prior to the transfer, the Port Operator must acknowledge the intention to conduct the transfer.

All small arms must be clear of ammunition whilst within the port area.

## 2.8. Dangerous Goods and Cargoes Enquiries

All enquiries relating to dangerous goods are to be directed to the Port Operator and must include sufficient detail to make an assessment of the risk posed and any additional restrictions that may be appropriate. At a minimum the following are to be included;

- UN Number
- Proper Shipping Name
- Packing Group
- For class 1 and class 7 the specific requirements set out in Annex A or B must be included

All enquiries are to be submitted via email to: [dangerousgoods@darwinport.com.au](mailto:dangerousgoods@darwinport.com.au)

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## SECTION 3: GENERAL PRECAUTIONS FOR HANDLING DANGEROUS GOODS AND CARGOES

This section outlines the minimum general precautions required for the handling of dangerous goods within the Port of Darwin.

### 3.1. Marking and Packaging

All dangerous goods and cargoes delivered to or from the port area shall be packaged, marked, labelled and placarded in accordance with the IMDG Code. Where the dangerous goods are to be loaded on to a ship, their packaging shall comply with the IMDG Code.

### 3.2. Documentation and Notification

All documentation must comply with the requirements of the IMDG code. Notification must be submitted on the applicable Dangerous Goods and Cargoes Forms in Annexes A, B and C as applicable.

### 3.3. Stowage and Segregation

Dangerous goods whilst within the port area must be segregated as follows;

- Whilst loaded on a ship in accordance with the IMDG Code
- Whilst stored within the port area in accordance with AS 3846
- Whilst loaded on a truck in accordance with the ADG Code

### 3.4. Trained Personnel

All personnel involved in the transport and the handling of dangerous goods must be trained to the appropriate level as specified in the IMDG Code and by AMSA.

### 3.5. Handling

All dangerous goods must be handled in a safe and efficient manner. Personnel must wear appropriate Personal Protective Equipment at all time.

### 3.6. Emergency Plan

The ship loading, unloading or transiting shall have an emergency plan for dealing with dangerous situations arising from handling or transporting dangerous goods. Where appropriate a spill kit shall be immediately available whilst the dangerous goods are within the port area.

### 3.7. Maintenance Activities

The following activities require prior written approval by the Port Management Officer;

- Immobilisation
- Hot Work

Confined space entry and cold work do not require a permit and are to be managed internally via the ship's safety management system.

### 3.8. Signals

All ships carrying dangerous goods whilst within the Port of Darwin shall fly flag B.

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### 3.9. Segregation of Dangerous Goods

Table 1 outlines the required segregation for dangerous goods within the port area.

CLASS	1.1 1.2 1.5	1.3 1.6	1.4	2.1	2.2	2.3	3	4.1	4.2	4.3	5.1	5.2	6.1	6.2	7	8	9	
Explosives	<b>1.1, 1.2, 1.5</b>	*	*	4	2	2	4	4	4	4	4	4	2	4	2	4	X	
Explosives	<b>1.3, 1.6</b>	*	*	4	2	2	4	3	3	4	4	4	2	4	2	2	X	
Explosives	<b>1.4</b>	*	*	2	1	1	2	2	2	2	2	2	X	4	2	2	X	
Flammable gases	<b>2.1</b>	4	4	2	X	X	2	1	2	2	2	2	X	4	2	1	X	
Non-toxic, non-flammable gases	<b>2.2</b>	2	2	1	X	X	1	X	1	X	X	1	X	2	1	X	X	
Toxic gases	<b>2.3</b>	2	2	1	X	X	2	X	2	X	X	2	X	2	1	X	X	
Flammable liquids	<b>3</b>	4	4	2	2	1	2	X	X	2	2	2	X	3	2	X	X	
Flammable solids (including self-reactive substances and solid desensitized explosives)	<b>4.1</b>	4	3	2	1	X	X	X	X	1	X	1	2	X	3	2	1	X
Substances liable to spontaneous combustion	<b>4.2</b>	4	3	2	2	1	2	2	1	X	1	2	2	1	3	2	1	X
Substances which, in contact with water, emit flammable gases	<b>4.3</b>	4	4	2	2	X	X	2	X	1	X	2	2	X	2	2	1	X
Oxidizing substances (agents)	<b>5.1</b>	4	4	2	2	X	X	2	1	2	2	X	2	1	3	1	2	X
Organic peroxides	<b>5.2</b>	4	4	2	2	1	2	2	2	2	2	2	X	1	3	2	2	X
Toxic substances	<b>6.1</b>	2	2	X	X	X	X	X	1	X	1	1	X	1	X	X	X	
Infectious substances	<b>6.2</b>	4	4	4	4	2	2	3	3	3	2	3	3	1	X	3	3	X
Radioactive material	<b>7</b>	2	2	2	2	1	1	2	2	2	2	1	2	X	3	X	2	X
Corrosive substances	<b>8</b>	4	2	2	1	X	X	X	1	1	1	2	2	X	3	2	X	X
Miscellaneous dangerous substances and articles	<b>9</b>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

**Table 1**

The numbers and symbols in the table have the following meanings:

- 1 - "away from"
- 2 - "separated from"
- 3 - "separated by a complete compartment or hold from"
- 4 - "separated longitudinally by an intervening complete compartment or hold from"
- X - the Dangerous Goods List has to be consulted to verify whether there are specific segregation provisions
- \* - Refer to section 7.2.7.1 of the IMDG Code for the segregation provisions between class 1 substances or articles

Packaging	Segregation Code 0	Segregation Code A	Segregation Code S
IBC Flat racks Platform Open top container	No segregation	Separated by at least 3 metres	6m in open 12 m in sheds
Closed container Portable tanks Closed road vehicle	No segregation	Away from, no separation required	3m in open 6m in shed

**Table 2**

## SECTION 4: TIME LIMITS

### 4.1. Time Limits

The following time limits apply for loading and unloading dangerous goods within port limits;

Time Limit	Class and Packing Group (PG)	Comments
2 hours	Class 1 Explosives	Explosives other than division 1.4 cannot be stored within the port area
12 hours (Red Line Cargo)	<b>Class 2.1</b> Flammable Gases <b>Class 2.3</b> Toxic Gases <b>Class 3 PG I</b> Flammable Liquids <b>Class 4.1 PG I</b> Flammable Solids <b>Class 4.2 PG I</b> Substances liable to spontaneous combustion <b>Class 4.3 PG I</b> Substances which in contact with water emit flammable gases <b>Class 5.1 PG I</b> Oxidizing Substances <b>Class 6.1 PG I</b> Toxic Substances <b>Class 8 PG I</b> Corrosive Substances	Where the quantity exceeds <i>500 kg</i> .  (If quantities are less than <i>500kg</i> then the consignee may apply in writing for the dangerous goods to remain within a restricted zone for up to 5 days dependant on operational requirement).
24 hours	Class 7 Radioactive Substances	This restriction applies without exception
5 days (Green Line Cargo)	All of Class 2, 3, 4, 5, 6, 8 or 9, other than those mentioned above	A nominal period of 5 days may be extended to green line dangerous goods depending on the operational requirements of the wharf.

**Table 3**

Where the dangerous goods are to be loaded in bulk the time limits apply from the completion of loading. Where the dangerous goods are being unloaded in bulk and transit cargo is on board, the time limits apply (for transit cargo) on completion of unloading.

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## SECTION 5: CLASS ONE EXPLOSIVES

### 5.1. Introduction

Class 1 comprises;

- Explosive substances, except those which are too dangerous to transport or those where the predominant hazard is one appropriate to another class.
- Explosive articles, except devices containing explosive substances in such quantity or of such a character that their or accidental ignition or initiation during transport shall not cause any effect external to the device either by projection, fire, smoke, heat or loud noise
- Substances and articles not mentioned above which are manufactured with a view to producing a practical, explosive or pyrotechnic effect.

Class 1 is divided into six divisions based on the risk posed as follows

- Division 1.1 – Explosives with a mass explosion hazard.
- Division 1.2 – Explosives with a projection hazard but not a mass explosion hazard.
- Division 1.3 – Explosives with a fire hazard and either minor blast or projection hazard or both but not a mass explosion hazard.
- Division 1.4 – Explosives which present no significant hazard.
- Division 1.5 – Very insensitive substances which have a mass explosion hazard.
- Division 1.6 – Articles containing very insensitive explosives

Explosive substances not covered by the IMDG Code shall not be conveyed through the port area.

### 5.2. Berth Limits

Table 4 outlines the berth limits for Class 1 Dangerous Goods

Berth	Maximum Separation Distance	Maximum NEQ Division 1.1, 1.5 and 1.6	Maximum NEQ Division 1.2	Maximum NEQ Division 1.3	Maximum NEQ Division 1.4
East Arm Wharf	50m	185kg	100kg	2 255kg	250 000kg
Fort Hill Wharf West	25m	50 kg	Nil	2 095kg	250 000kg
Fort Hill Wharf East	35m	110kg	Nil	2162kg	250 000kg
Fishermans and Raptis Wharf	20m	40kg	Nil	2 060kg	250 000kg
Sea Swift	150m	1000kg	1000kg	12 500kg	250 000kg
Barge Express	130m	820kg	820kg	8 500kg	250 000kg

**Table 4**

The Port Management Officer may, in his or her sole discretion, give approval to operate outside these limits on consideration of written application by the consignor or representative, including a detailed cargo handling plan and risk assessment, and having regard to possible impacts on other operators and stakeholders.

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An anchorage may be made available for the handling of Class 1 Explosives on application and in the Port Management Officer's sole and absolute discretion.

### 5.3. Mixed Consignments

Where two or more divisions of Class 1 Explosives are to be handled simultaneously, the greater of the applicable separation distances is to be applied.

### 5.4. Handling and Transport Requirement

The following precautions must be observed when handling Class 1;

- Explosives (other than Division 1.4) shall not be brought onto a berth for loading until the ship is ready to receive them and shall be the last cargo loaded prior to departure.
- Explosives (other than Division 1.4) shall not be unloaded from a ship unless the means of transport by which they are to be removed from the Port Area is ready to receive them. And must be the first cargo discharged.
- Explosives of Divisions other than 1.4 shall be taken directly to or from a ship, and not be held on a berth for more than 2 hours. The separation distance shall be clearly marked, and access controlled. Where the separation distance is less than 15 metres, the area on the wharf of 15 metres shall be cleared and marked.
- Explosives shall be handled in a safe, efficient and secure manner.
- Explosives shall be unloaded as soon as reasonably practicable.
- Repairs involving Hot Work shall not be permitted on the ship or in the case of city wharves on the berth until the explosives have been removed. In the case of East Arm Wharf, hot work shall not be conducted within two times the separation distance.
- Smoking shall be prohibited on the ship and the berth, except in safe areas. Notices shall be prominently displayed on the ship and on the berth.
- Adequate and appropriate firefighting equipment shall be available immediately and throughout the period of the transfer.
- Explosives not classified in accordance with the IMDG Code shall not be handled within the port area.
- Road vehicles carrying explosives shall remain at least 100 metres apart.
- Forklifts used in the handling of Explosives shall not be petrol powered, must be fitted with spark arresters where appropriate and shall be inspected before use to ensure they are free from leaks
- Unattended vehicles shall not be within the separation distance or 15 metres of explosives (whichever is greater).
- When more than 100 kg NEQ of explosives is handled, other than Division 1.4, a consignee's representative shall be present and have access to expert technical advice in the event of an incident.
- Explosives shall not be handled during an electrical storm.
- Bunkering shall not take place within the separation distance and on the ship loading or unloading explosives during the handling of explosives.

### 5.5. Ship requirements;

The following precautions must be observed when handling Class 1;

- The ship's engines and ancillary equipment shall be kept ready at all time, so that the ship can leave the berth at short notice.

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- The ship shall, so far is practicable, be berthed in a direction that allows the quickest departure from the berth.
- Class 1 shall be stowed and segregated in accordance with the requirements of the IMDG code whilst on-board a ship.
- Whilst handling Class 1, with the exception of Division 1.4, adequate and appropriate firefighting equipment and water shall be immediately available on the ship. Fire hoses shall be run out and ready for immediate use.

### 5.6. Scheduling Ships

For ships loading or unloading explosives, adjacent ships are to be berthed so that the accommodation quarters are as far away from the Class 1 as practicable.

### 5.7. Ordinary Berths

Unless a Special Berth is declared, all berths shall be considered ordinary berths.

Class 1 divisions 1.1, 1.2, 1.3, 1.4,1.5 and 1.6 shall be separated from Protected Places, other ships accommodation spaces and bunkering vessels in accordance with the requirements in Table 5. With the approval of the Port Operator the separation distance may be halved to main roads and railways (except in the case of Class 1, division 1.6).

Class 1 Division 1.4S is not restricted in the amount that can be handled or remain on-board a ship as transit cargo.

### 5.8. Transit Cargo

Where the NEQ of transit Cargo exceeds the limit in table 5, or the separation distance to adjacent ship's accommodation cannot be maintained, a special berth is required.

### 5.9. Special Berths

Darwin Port does not have a designated Special Berth. Where the NEQ exceeds the limit in table 5, an anchorage or special berth may be made available on application and will be considered on a case by case basis. An application for a special berth must be submitted well in advance of the cargo arriving in the port area.

Section 8 details the Special Berth requirements and application process.

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NEQ kg	Separation Distance in metres			
	Division			
	1.1, 1.5, 1.6	1.2	1.3	1.4
25	10	50	10	10
50	25			
100	33			
200	52			
300	68			
400	82			
500	95			
1 000	150			
1 500	191			
2 000	240			
2 500	257	220	87	
3 000	284	225	92	
4 000	350	235	105	
5 000	380	245	110	
7 500	424	265	125	
10 000	480	280	140	
15 000	546	300	158	
20 000	610	320	175	
25 000	650	340	186	
30 000	689	340	199	20
40 000	762	360	218	
50 000	820	375	240	
75 000	940	400	273	
100 000	1 040	410	300	
150 000	1 180		345	
200 000	1 300		375	
250 000	1 400		405	

**Table 5**

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## SECTION 6: AMMONIUM NITRATE

### 6.1. Introduction

The requirements in this section apply to Ammonium Nitrate and Ammonium Nitrate-based fertilizer listed as Class 5.1 in the IMDG code (UN Numbers 2067, 3375, 2426 and 1942). Ammonium Nitrate supports combustion and significantly increases the risk of explosion during a fire.

Ammonium Nitrate must be removed from the port area once unloaded. Regardless of packaging, Ammonium Nitrate cannot be stored on the wharf or within the port area.

### 6.2. Berth Limits

The Port Operator has evaluated the risks associated with Ammonium Nitrate within port limits and determined the maximum quantities permissible. These are shown in table 6.

For quantities of Ammonium Nitrate exceeding 400 tonnes in freight containers or 150 tonnes in other packaging, but not exceeding the limits in Table 6, an application for a special berth must be submitted as outlined in section 8.

Berth	Limit
EAW	6,000 tonnes
FHW	10 tonnes
Sea Swift	40 tonnes (see note)
Hudson Creek	2,000 tonnes

**Table 6**

**Note:** 40 tonnes may be handled at the Sea Swift facility provided it proceeds directly to the wharf space located to the East of the Sea Swift facility, does not exceed the appropriate time limit in table 3 and each container is segregated by no less than 6 meters. Where these conditions cannot be met a maximum of 30 tonnes shall be handled at the Sea Swift facility.

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## SECTION 7: CLASS 7 RADIOACTIVE SUBSTANCES

This section outlines the requirements for handling Class 7 dangerous goods.

### 7.1. General Requirements

Whilst within the port area the following apply;

- Trucks carrying radioactive substances shall be scheduled to avoid waiting within the port area.
- Radioactive substances shall not remain within the port area for greater than 24 hours

### 7.2. Packaging and Documentation

No Class 7 radioactive substances shall be brought into the port area unless the packages or freight containers comply with the Code of Practice for the Safe Transport of Radioactive Material.

All documentation shall comply with the Code of Practice for the Safe Transport of Radioactive Material, including the consignor's declaration. The consignor shall provide the emergency arrangements appropriate to the consignment with the Dangerous Goods application. If the emergency arrangements are not included the consignment shall not enter the port area.

### 7.3. Radiation Monitoring

Radiation monitoring shall be carried out by the shipper in accordance with regulatory requirements. The dose limit for operational personnel shall not exceed 1 millisievert (mSv) per year.

### 7.4. Spill Kits

Where appropriate to the nature of the cargo a spill kit shall be immediately available for the duration the Class 7 is within the port area. Where a spill kit is not available the consignor is to provide, in writing, a statement outlining the nature of the cargo, the nature of the packaging or freight container and why a spill kit is not appropriate.

### 7.5. Transport Index Greater than 50

Where the Transport Index (TI) is greater than 50 the freight container the following restrictions apply;

- The freight container shall be transported under the conditions for a "Full Load" or exclusive use as set out in the Australian Code of Practice for the Safe Transport of Radioactive Material.
- Radiation shall not exceed 2mSv/h at any point and 0.1mSv/h at 2 metres from the outside of the freight container.
- None of the outer dimensions of the freight container shall be less than 1.5 metres and the internal volume shall be greater than 3 cubic metres.
- The freight container shall be taken directly to or from a ship and not be stored on the berth.

### 7.6. Requirements for Hardstand Storage

When Class 7 is stored within the port area the following requirements apply;

- Packages and freight containers shall be arranged and stacked to eliminate the risk of criticality hazard.
- A separation distance of 6 metres shall apply to all yellow label consignments.

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- Class 7 packages and freight containers shall be separated from areas frequented by person in accordance with table 7.
- Stacks of packages or freight containers shall be separated from places occupied by person (rest rooms and offices) by a minimum of 13 metres. Where the separation distance in table 7 is greater than 13 metres, the 13 metres shall be added to the distance in table.
- A clear distance of 6 metres shall be maintained between stacks of packages or freight containers.
- The TI of stacks of packaged or freight containers (other than LSA materials) shall not exceed 50.
- Access to the area where Class 7 is stored shall be limited to essential duties only and the time spent handling the packages shall be kept to a minimum.
- The area shall be illuminated at night.
- Sufficient equipment, which is to be supplied by the shipper in the case of exports or consignee in the case of imports, shall be readily available at the berth to clean up any spillage or accident involving radioactive substances.

### 7.7. Actions in the Event of a Spill or Damage

In the event of spillage or damage to the package or freight container the following immediate steps shall be taken;

- All personnel shall, be evacuated to a position up wind of the radioactive material.
- The Port Operator Cargo department and the Harbour Control shall be immediately notified.
- WorkSafe NT and ARPANSA shall be notified of the spill.
- Only properly trained personnel with appropriate PPE and equipment shall respond to the spill.

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

*Table 7*

## SECTION 8: SPECIAL BERTHS

Darwin does not have a designated special berth. Where the quantity of dangerous goods or NEQ requires a special berth, the consignor or representative may make an application in writing to the Port Operator outlining the following;

- UN Number
- Packing Group
- Proper shipping name
- Division and Compatibility Group (for Class 1)
- Place of Origin
- Number of Consignments per annum
- A Cargo Handling plan outlining how the dangerous goods will be discharged and handled on the wharf

A detailed risk assessment will be conducted and where the risks and the impacts on other operators are acceptable, the application will be assessed on a case by case basis by the Port Management Officer.

## SECTION 9: REVIEW STATEMENT

This Port Notice will be reviewed biennially by the Port Management Officer.



**TERRY O'CONNOR**  
Chief Executive Officer  
Darwin Port Operations Pty Ltd  
Port Operator  
30 April 2019

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**Annex A – Dangerous Goods Notification – Packaged Goods**

**DANGEROUS GOODS NOTIFICATION – PACKAGED GOODS**

**Vessel and Agent Details**

Vessel Name:	
Lloyds/IMO Number:	
ETA:	Berth:
Agent Name:	Agency:
Mobile Number:	Phone Number:
Email:	
Date for Cargo Operations:	Times:

Type of Cargo Operation:      Load       Unload       Transit

**Dangerous Goods Manifest**

*Note: a manifest must be attached including all dangerous goods including transit cargo. The manifest must include a container number, UN Number, packing group, proper shipping name, flash point, quantity, number of packages and identify if the dangerous good is a marine pollutant. Transit cargo must be clearly identified.*

**For Class 1 Dangerous Goods**

UN Number:	Division:
Proper Shipping Name:	
NEQ:	Compatibility Group:

**For Class 7 Dangerous Goods**

UN Number:	Hazard Category:
Proper Shipping Name:	
Transport Index (TI):	
Type of Packaging:	
The Name and activity of the Radio Active Nuclides:	

**Condition of Cargo** - Please select the most appropriate statement below

All Containers are free from leaks:                      Yes                       N/A   
 Containers have suffered damage or are leaking:      Yes                       N/A

Note: Where containers are damaged or leaking a report outlining the damage is to be submitted.

**Declaration**

I confirm that all dangerous goods have been declared and that all dangerous goods are packaged, placarded and stowed in accordance with the requirements of the IMDG Code.

Signed (Master, Owner or Agent):

Name:	Date:
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## Annex B – Dangerous Goods Application – Bulk

**DANGEROUS GOODS APPLICATION - BULK**
**Vessel And Agent Details**

Vessel Name:	
Lloyds/IMO Number:	
ETA:	Berth
Agent Name:	Agency:
Mobile Number:	Phone Number:
Email:	
Date for Cargo Operations:	Times:

 Type of Cargo Operation:      Load       Unload       Transit 
**Bulk Dangerous Good**

UN Number:	IMDG Classification:
Packing Group:	MARPOL NLS Category:
Flash Point:	Subsidiary Risk:
Quantity Discharged:	Quantity Remaining Onboard:
Quantity Loaded:	Certificate of Manufacture:

**Vessel Certificate Details**

Vessel Certificates	Expiry Date
International Oil Pollution Prevention Certificate	
International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances in Bulk	
Certificate of Fitness for the Carriage of Dangerous Chemicals in Bulk	
Certificate of Fitness (Gas Carrier Code)	
International Certificate of Fitness for the Carriage of Liquefied Gases in Bulk	
Cargo Inhibitor Certificate	

**Status of Cargo and Cargo Handling System Declaration**

Are there any defects with the cargo containment or transfer systems?

Does the condition of the cargo present a hazard to the port area?

Are there any defects on the vessel presenting a danger to the port area or environment?

**Declaration**

The information contained above is truthful and accurate. The condition of the cargo, containment, handling system and the vessel do not present a hazard to the port area or the environment.

Signed (Master, Owner or Agent):

Name:	Date:
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## Annex C – LNG Questionnaire

### LNG Questionnaire

The LNG Questionnaire is to be completed and submitted 48 hours prior to the ship’s arrival. All questions must be answered.

1. Is the vessel free from tank leakage?
2. Is the inert gas system fully operational?
3. Are there any defects the on the vessel machinery and equipment that may affect safe pilotage, berthing, cargo or ballast operation?
4. Have stress calculations for the envisaged program of cargo handling and ballasting been made, and is the full stress calculated within the safety limits?
5. Are the cargo tanks and lines free of air?
6. Is the boil off control equipment in good working order?
7. Are all gas detection analysers calibrated and operating correctly?
8. Are all cargo system emergency stops, with associated alarms and interlocks, tested and operating correctly?
9. Are all independent tanks high level alarms tested and operating correctly?
10. Are all high and low pressure alarms tested and operating correctly?

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