PORT OF PORTLAND

Dangerous Goods Management Plan

Port of Portland

Edition 1
Version 1.0 July 2023

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GLOSSARY OF TERMS

Work or Term	Meaning
ADG Code	Australian Dangerous Goods Code
AMSA	Australian Maritime Safety Authority
ARPANSA	Australian Radiation Protection and Nuclear Safety Agency
Dangerous Goods	Means any goods as defined in the IMDG code
Green Line Cargo	Means dangerous good of Class 2, 3, 4, 5, 6, 8, or 9 other than those mentioned above are considered green line cargo and may remain in the port area for a period of 5 days
Handling	For the purpose of this plan means the operations of loading or unloading of a ship , transfer to, from or within a terminal area or shop or transfer between ships or other modes of transport
IAEA	International Atomic Energy Agency
IMDG Code	International Maritime Dangerous Goods Code
IMO	International Maritime Organisation
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
Packing Group	Means one of the three hazard groups to which dangerous good (excluding classes 1, 2, 6.2 and 7) are assigned in the IMDG Code in decreasing order (I High Danger, II Medium Danger and III Low Danger)
Port Area	For the purpose of this plan the port area refers to the port land and port waters of the port of portland as detailed in section 1.5
Proper shipping name	Means the entry specified in the IMDG Code in Table A, Chapter 3.2, that most accurately describes the goods
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 on 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 area facility for dangerous good or cargoes that is outside the property area of the port area
Yellow Line Cargo	For the purposes of this document is defines as all Class 7 Dangerous good and can only remain in the port for a period of 24 hours
Red Line Cargo	Means goods as detailed in section 4.2 where amount exceeds 500 kilograms are considered redline cargo and are required to be removed from the port within 12 hours
SCO	Means a solid object that is not itself radioactive but that has radioactive material distributed on its surfaces
SDS	Safety Data Sheet
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-1 or SCO-1 material, which is used to provide control over both nuclear criticality safety and radiation exposure
Vessel	Has the same meaning as the Marine Safety Act 2010

REVISION HISTORY

Edition 1 Version Number	Date	Approval/ Comments
0.1	April 2023	Initial draft. Not approved.
0.2	June 2023	Revised Draft for consultation. Not approved.
1.0	July 2023	Approved: Edition 1, Version 1.0.

DOCUMENT CONTROL AND MANAGEMENT

The master version of this document is available from the Port of Portland (POPL) website. All printed documents are uncontrolled and may not contain the latest amendments. Amendments will be promulgated from time to time as required.

DOCUMENT OWNER AND REVIEW

The Document Owner is the Harbour Master / Marine Manager. This plan is reviewed on a biennial basis or after an incident where it is identified in the investigation that this plan needs to be amended to incorporate lesson/s learnt.

1. INTRODUCTION

1.1 Port of Portland

Port of Portland is located on the southwest coast between Melbourne and Adelaide, providing a logistics gateway to the rest of Australia and the world, with connectivity to national road and rail networks. Specialising in the export of bulk commodity products. Port of Portland services the thriving agriculture, sustainable forestry and mining industries across the Wimmera-Mallee, Green Triangle and Murray Basin regions which extend from northern and western Victoria to south-east South Australia.

It is the largest sustainable hardwood chip export port in the world, and with throughput volumes hitting 7.5 million tonnes in 2016-17, is a major economic contributor to both Victorian and South Australian regional communities.

Port of Portland provides its import and export customers with flexible, multi-use and efficient berths and a gateway to international markets in China, Japan, Korea, Indonesia, and Taiwan as well as other Australian regions. The Port currently handles seven commodities including sustainable forestry products, livestock, grain, mineral sands, fertiliser, smelter products and wind turbines.

1.2 Conventions, IMO Recommendations and Legislation

1.2.1 International

The following international conventions and IMO recommendations were referenced in developing this plan:

- International Maritime Dangerous Goods Code 2020 & 2022 (IMDG)
- IMO, 'Recommendations on the Safe Transport of Dangerous Cargoes and Related Activities in Port Areas', London, 1995.
- United Nations 'Recommendations on the Transport of Dangerous Goods: Model Regulations', 12th Edition, Oct 2001.
- IAEA Regulations for the Safe Transport of Radioactive Material

1.2.2 Commonwealth

The following commonwealth legislation was referenced in developing this plan:

- Navigation Act 2012
- Marine Orders 41 (MO-41)

1.2.3 Victorian

The following Victorian legislation was referenced in developing this plan:

- Occupational Health and Safety Act 2004
- Occupational Heald and Safety Regulations 2017
- Marine Safety Act 2010
- Dangerous Goods Act 1985
- Dangerous Goods (Storage and Handling) Regulations 2012
- Dangerous Goods (Transport by Road or Rail) Regulations 2018
- Dangerous Goods (HCDG) Regulations 2016
- Dangerous Goods (Explosives) Regulations 2022
- Radiation Act 2005
- Radiation Regulations 2017
- Environmental Protection Act 2017
- Environmental Protection Regulations 2021
- Environmental Protection Transitional Regulations 2021

1.3 Standards and Codes

The following standards and codes were referenced in developing this plan:

- Australian Standard 3846-2005: The handling and transport of dangerous cargoes in port areas
- Australian Dangerous Goods Code (ADG) edition 7.7
- Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) Radiation Protection Series C-2 (Rev.1) Code of Practice for the Safe Transport of Radioactive material (2019)

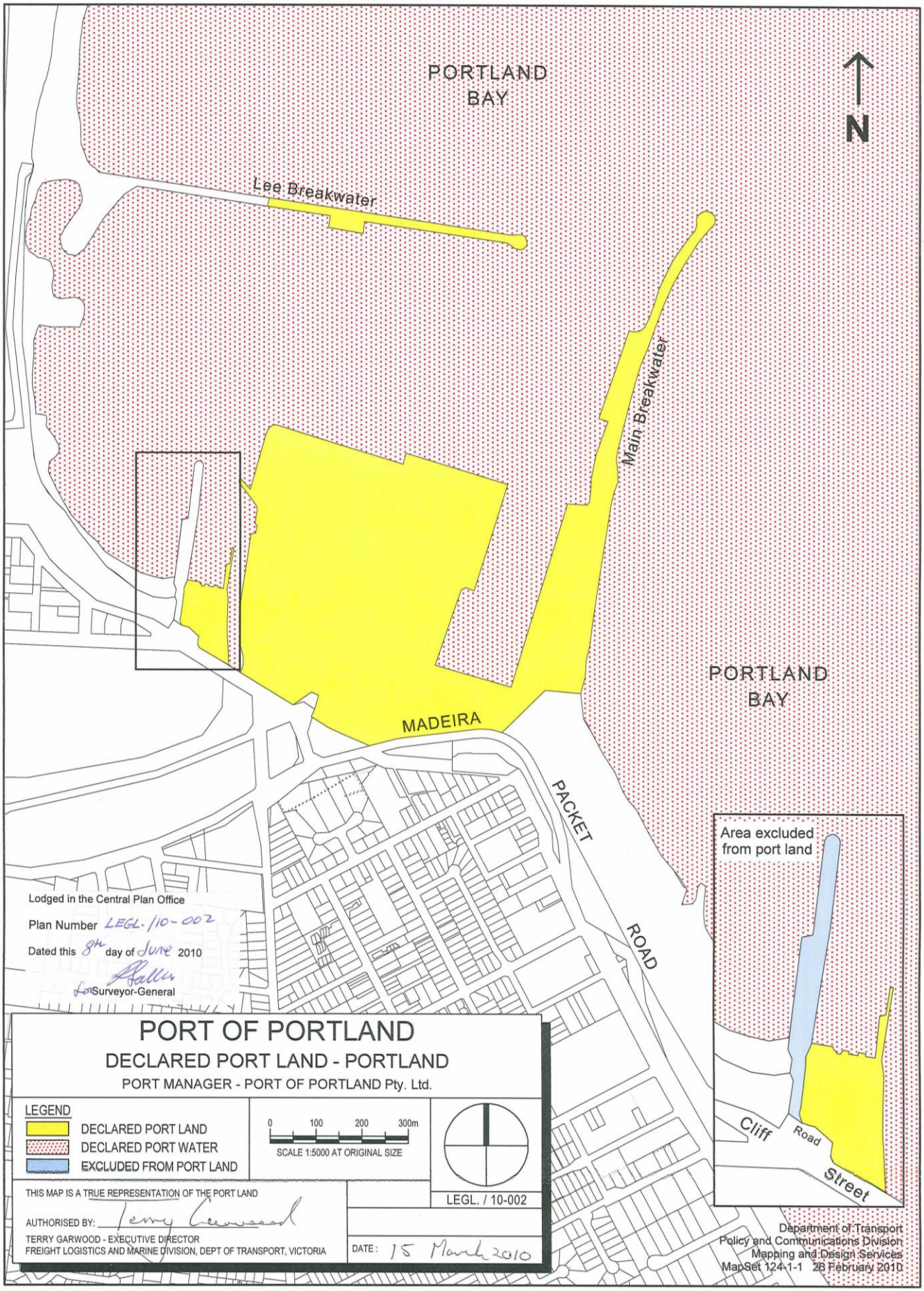
1.4 Purpose

The purpose of this document is to detail the requirements for the handling and storage of dangerous goods (cargo) in the port area of the Port of Portland.

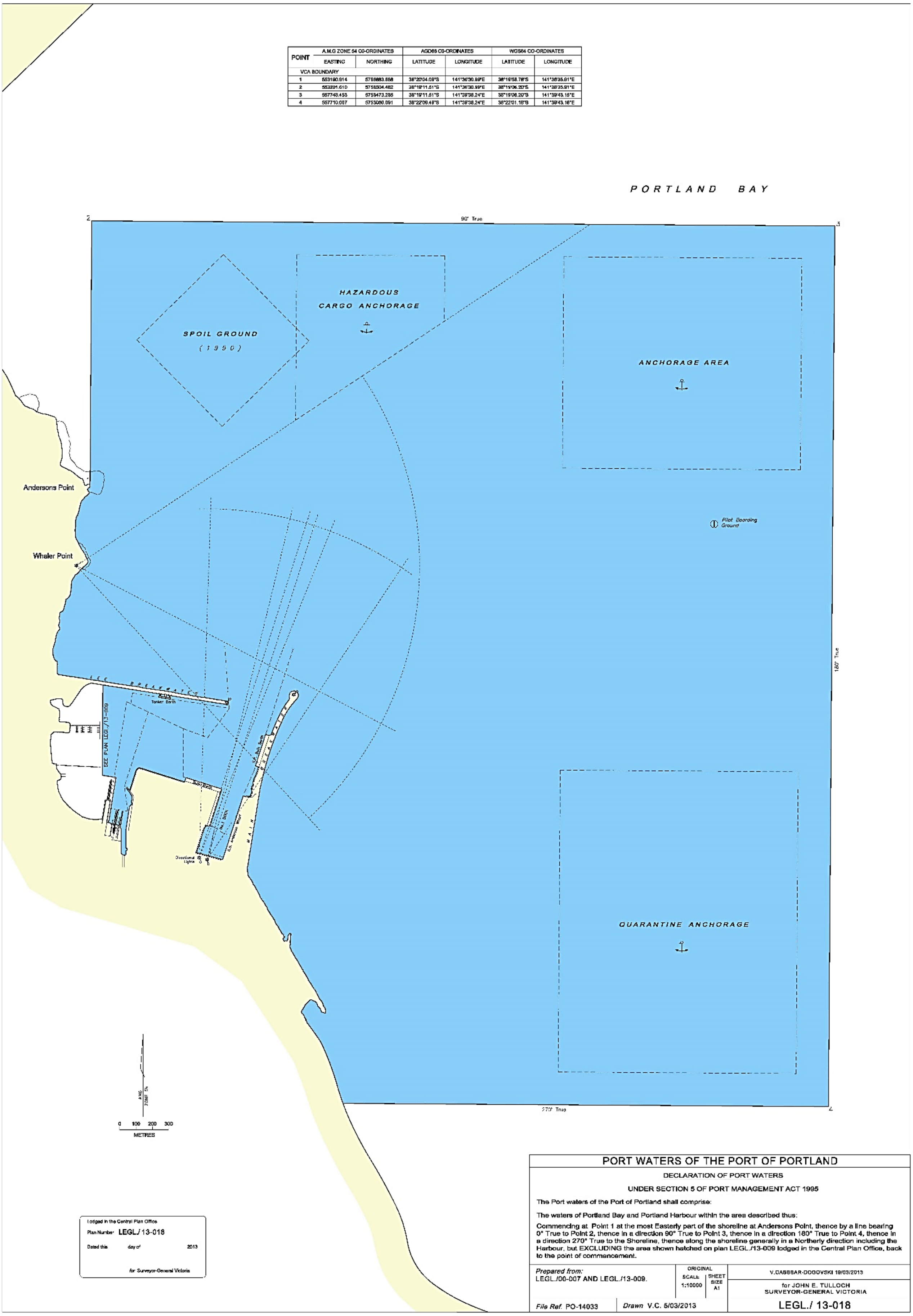
The port does not routinely handle dangerous goods outside of bulk liquids (non-flammable). This management plan has been developed to assist in safely facilitating the handling and storage of dangerous goods in the port area. Any proponents seeking to import, export or transit dangerous goods through the port need to engage with POPL early to ensure that the activity can be facilitated.

1.5 Scope

This document applies to all port users involved in the export, import or handling of dangerous good in the port area for the Port of Portland. The port area is detailed in the diagram below:



Chartlet 1: Declared Port Land



POINT	A.M.G ZONE 54 CO-ORDINATES		AGD66 CO-ORDINATES		WGS84 CO-ORDINATES	
	EASTING	NORTHING	LATITUDE	LONGITUDE	LATITUDE	LONGITUDE
VCA BOUNDARY						
1	553190.914	5756883.858	38°20'04.09"S	141°36'30.99"E	38°19'58.78"S	141°36'35.91"E
2	553201.610	5758504.482	38°19'11.51"S	141°36'30.99"E	38°19'06.20"S	141°36'35.91"E
3	557748.453	5758473.285	38°19'11.51"S	141°39'38.24"E	38°19'06.20"S	141°39'43.15"E
4	557710.007	5753080.091	38°22'06.49"S	141°39'38.24"E	38°22'01.16"S	141°39'43.16"E

Chartlet 2: Port Waters

2. PRECAUTIONS FOR HANDLING DANGEROUS GOODS

Where the requirements specified in this plan or AS 3848 conflicts with Commonwealth or State Dangerous Goods Acts and/ or regulations, the acts and regulations shall apply.

This section details the general precautions required for the handling of dangerous goods and cargoes in the port of Portland.

2.1 Marking and Packaging

All dangerous goods delivered to or from the port area shall be packaged, marked, labelled and placed in accordance with the IMDG Code.

2.2 Tankers at Non Tanker Berths

The Port of Portland does not have a designated tanker berth. All tankers with low flashpoint cargoes cannot berth without approval from the Harbour Master. At a minimum the following shall be in place:

- Cargo operations (loading and unloading) cannot take place
- Vessels operating without inert gas can only berth when all cargo tanks, slop tanks and associated pipework are gas free
- Vessels operating with inert gas, shall ensure that positive inert gas pressure in all tanks is maintained at all times
- Oxygen content of the atmosphere in each cargo or slop tank must be less than 5% by volume
- A fire fighting vehicle/pump with two portable monitors capable of delivering a foam solution to cover the manifold and deck areas of the vessel
- Sufficient foam concentrate for 30 minutes application at a rate of 6%

2.3 Stowage and Segregation

All dangerous goods when in the port area shall be stowed and segregated in accordance with the following:

- Whilst loaded on the 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

The number and symbols in the table 1 below 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 good lost 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

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 **1.1, 1.2, 1.5**	*	*		*	4	2	2	4	4	4	4	4	4	2	4	2	4	X
Explosives **1.3, 1.6**	*	*		*	4	2	2	4	3	3	4	4	4	2	4	2	2	X
Explosives **1. 4**	*	*		*	2	1	1	2	2	2	2	2	2	X	4	2	2	X
Flammable Gases **2. 1**	4	4		2	X	X	X	2	1	2	2	2	2	X	4	2	1	X
Non-toxic, non-flammable gases **2. 2**	2	2		1	X	X	X	1	X	1	X	X	1	X	2	1	X	X
Toxic gases **2. 3**	2	2		1	X	X	X	2	X	2	X	X	2	X	2	1	X	X
Flammable liquids **3**	4	4		2	2	1	2	X	X	2	2	2	2	X	3	2	X	X
Flammable solids (Including self-reactive substances and solid desensitised explosives) **4. 1**	4	3		2	1	X	X	X	X	1	X	1	2	X	3	2	1	X
Substances liable to spontaneous combustion **4. 2**	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 **4. 3**	4	4		2	2	X	X	2	X	1	X	2	2	X	2	2	1	X
Oxidizing substances (agents) **5. 1**	4	4		2	2	X	X	2	1	2	2	X	2	1	3	1	2	X
Organic peroxides **5. 2**	4	4		2	2	1	2	2	2	2	2	2	X	1	3	2	2	X
Toxic Substances **6. 1**	2	2		X	X	X	X	X	X	1	X	1	1	X	1	X	X	X
Infectious substances **6. 2**	4	4		4	4	2	2	3	3	3	2	3	3	1	X	3	3	X
Radioactive material **7**	2	2		2	2	1	1	2	2	2	2	1	2	X	3	X	2	X
Corrosive substances **8**	4	2		2	1	X	X	X	1	1	1	2	2	X	3	2	X	X
Miscellaneous dangerous substances and articles **9**	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Table 1 Required Segregation of Dangerous Goods in the Port Area

2.4 Required Training

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

2.5 Handling

All dangerous goods shall be handled in a safe and efficient manner. Personnel shall wear appropriate PPE as identified in the SDS (Safety Data Sheet).

2.6 Emergency Plan

An emergency plan for the handling and transport of the dangerous goods shall be in place. Spill kits where necessary shall be readily available.

The vessel shall provide POPL with a manifest detailing all dangerous goods onboard including transit cargo.

2.7 INTER CODE Flag Requirements

All vessels carrying dangerous goods shall fly the International Code of Signals (INTERCODE) Flag B whilst in port waters.

2.8 Additional Requirements for Handling and Transport of Class 1 DG

The following additional precautions are required when handling Class 1 DG:

- 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 onto a ship prior to departure
- Explosives (other than division 1.4) shall not be unloaded from the ship unless the means of transport by which they are to be removed from the port area is ready to receive them
- Explosives (other than division 1.4) shall not be stored on the berth for more than 2 hours
- Where explosives are on the wharf or being loaded or unloaded from the truck the separation distance shall be clearly marked
- Where the separation distance is less than 15 metres a minimum zone of 15 metres shall be implemented
- Hot works will not be permitted within 2 times the required separation distance
- Smoking will not be permitted on the ship or berth
- Forklifts shall not be petrol powered and shall be fitted with spark arresters where appropriate and inspected to confirm they are free from leaks
- Explosives shall not be handled during electrical storms
- The vessel main engine and ancillary equipment shall be kept ready at all times so that the ship can depart the berth at short notice
- The vessel will be berthed head out
- Whilst handling explosives with the exception of division 1.4 adequate and appropriate firefighting equipment shall be immediately available on the ship

2.9 Additional Requirements for Handling and Transport of Class 7 DG

The following additional precautions are required when handling Class 7 DG:

- Class 7 DG are to be packed and accompanied by the documentation required in accordance with the requirement of the Code of Practise for the Safe Transport of Radioactive Material
- Emergency arrangements as agreed to by POPL and appropriate to the consignment shall be in place
- Radiation monitoring shall be carried out by the shipper
- Spill kits shall be immediately available appropriate to the material being handled
- TI cannot exceed 50 without prior agreement from POPL

3. NOTIFICATION

Outside of Liquid Pitch and fertilisers, dangerous goods are routinely handled at the port of Portland. The importer or exported needs to engage early with POPL to ensure that the dangerous goods can be handled through the port. POPL reserves the right to determine which dangerous goods can be safely handled through the port. Proponents are strongly advised to engage with the port in the planning stages.

No less than 48 hours notice is required to load, unload or transit dangerous goods through the port. For packaged goods the agent of the vessel is required to submit the AMSA 250 Multimodal DG Form to shipping@portofportland.com.au.

Or for bulk dangerous goods, a manifest including all dangerous goods, detailing:

- UN Number
- IMDG Classification
- Flashpoint
- Subsidiary risk
- MARPOL NLS Category
- Quantity on board
- Quantity to be discharged or loaded
- Quantity remaining

Note all transit dangerous goods are to be included on the notification.

4. TIME LIMITS IN THE PORT AREA

This section details the time limits for dangerous goods in the port area. For convenience they are divided into groups as detailed below. For export commodities the time applies from the entry into the port area to the departure of the vessel from the port area. For import cargoes the time applies from the first line of the vessel to the removal of the commodity from the port area.

4.1 Class 1 Explosives

Class 1 explosives with the exception of division 1.4 cannot be stored within the port and shall be removed within 2 hours. That is the dangerous goods shall be discharged first and shall depart the port as soon as unloaded. Or shall be loaded last and the trucks delivering the explosive cannot loiter in the port area.

4.2 Red Line Cargo

Where the amount exceeds 500 kilograms the classes and packing groups detailed below are considered redline cargo and are required to be removed from the port within 12 hours:

- Class 2.1 Flammable Gases
- Class 2.3 Toxic Gases
- Class 3 Packing Group I Flammable liquids
- Class 4.1 Packing Group I Flammable solids
- Class 4.2 Packing Group I Substances liable to spontaneous combustion
- Class 4.3 Substances which in contact with water emit flammable gasses
- Class 5.1 Packing Group I Oxidizing substances
- Class 6.1 Packing Group I Toxic Substances
- Class 8 Packing Group I Corrosive Substances

For export commodities the time applies from the entry into the port area to the departure of the vessel from the port area. For import cargoes the time applies from the first line of the vessel to the removal of the commodity from the port area.

4.3 Yellow Line Cargo

All class 7 dangerous goods are considered yellow line cargo and are required to be removed from the port area within 24 hours.

4.4 Green Line Cargo

All dangerous goods of Class 2, 3, 4, 5, 6, 8, or 9 other than those mentioned above are considered green line cargo and may remain in the port area for a period of 5 days.

5. QUANTITY LIMITS

This section details the quantity limits of certain dangerous goods on each berth.

5.1 Class 1

Table 1 details the berth limits for Class 1 DG.

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
KSA 1	20	25	Nil	2,000	250,000
KSA 2	20	25	Nil	2,000	250,000
Berth 5	20	25	Nil	2,000	250,000
Berth 6	20	25	Nil	2,000	250,000
SLP	0m	Nil	Nil	Nil	Nil
Smelter Berth	50	100	100	3,000	250,000

Table 1 Berth Limits for Class 1 DG

5.2 Ammonium Nitrate

Class 5.1 DG Ammonium Nitrate (UN Numbers 2067, 3375, 2426 and 1942) is not handled through the port. The port will consider enquiries on a case-by-case basis.

5.3 Class 7 Radioactive Substances

Class 5.3 Radioactive Substances are other than LSA materials are not normally handed through the port. The port will consider enquiries on a case-by-case basis. Any Class 7s through the port must be approved by the Department of Health (Vic). Please note, a licence issued for this purpose by another jurisdiction does not cover the transport within Victorian waters or ports.

6. ENQUIRIES TO HANDLE DANGEROUS GOODS

All enquiries relating to dangerous goods are to be sent via email to shipping@portofportland.com.au and must include the following:

- UN Number
- Propper Shipping Name
- Packing Group
- SDS
- Quantity and frequency of shipments expected
- For Class 1 the NEQ
- For Class 7 the TI
- Details on the expected vessel specifications
- Any specific hazards associated with the handling of the dangerous goods

POPL may require assistance from the proponent in conducting a risk assessment to determine operational parameters for the dangerous goods.