



Title: Dangerous Goods Management Plan (DMSB)

DOCUMENT CONTROL			
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APPROVED VARIANCE

There are currently no approved variances for this plan and is to comply with Australian rules and regulations.

APPLICABILITY

This Plan applies to all of the Darwin Marine Supply Base.

SAFETY CRITICAL

There are no safety critical tasks within this Plan.

DOCUMENT REFERENCES	
Internal References	<ul style="list-style-type: none"> • GOP-HSSEQ-013 - Environmental Aspect Impacts Register • GOP-HSSEQ-014 - Environmental Review • GOP-HSEQ-024 - Personal Protective Equipment • GOP-HSSQ-039 - Monitoring and Measurement • GOP-HSSEQ-042 - Planned Inspections • GOP-HSEQ-046 - Service Improvement Process (SID) • GOP-HSEQ-047 - Task Based Risk Assessment
External References	<ul style="list-style-type: none"> • Work Health and Safety Regulations • Work Health and Safety Act • IMO Recommendations on the Safe Transport of Dangerous Cargoes and Related Activities in Port • AARPANSA Code of Practice: Safe Transport of Radioactive Material 2008 • IMDG Code • The Australian Dangerous Goods Code (ADG Code) • Ports Management Act • Darwin Port (Handling and Transport of Dangerous Cargoes) By -Laws • NT Dangerous Goods Act • NT Dangerous Goods Regulations • NT Marine Act • AS 3846 - 2005 The Handling and Transport of Dangerous Cargoes in Port Areas • The Australian Code of Transport of Explosives by Road and Rail • Marine Orders • AMSA • Darwin Port Dangerous Goods and Cargoes - Port Notice

DOCUMENT SCOPE

ASCO Australia has established this Dangerous Goods Plan to ensure matters within the scope of all operational requirement provides adequate protection of employees, others involved in its operations, the public and the



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environment. This plan sets out the aims of ASOC Australia and highlights the commitment to identify and manage all aspects of this plan.

Dangerous Goods are chemicals which have the potential to present an immediate threat to people, property or the environment if not properly controlled. They are divided into nine classes, some of which are divided in sub-classes, accordingly to the nature of the hazard, for further information, consult the Australian Dangerous Goods Code.

For the purpose of this document, the term "dangerous goods" also includes "goods too dangerous to be transported" under the ADG Code.

NOTE:
Nothing in the plan relieves the consignor (shipper) or anyone else involved in the handling of Dangerous Goods or Cargoes of their responsibility under International, Commonwealth and Northern Territory legislation and requirements. Notification to the Port Operator or ASCO does not relieve a consignor of their obligations to notify the competent authority to ship dangerous goods or cargo.

This Dangerous Goods Plan applies to the transport, storage and handling of Dangerous Goods and Cargoes within the Darwin Marine Supply Base.

REVISION HISTORY		
Rev	Date	Comment
0	29/09/2013	Creation of plan
1	18/07/2015	General Review
2	01/03/2016	General Review
3	12/07/2016	Review after Port Update
4	04/02/2017	New document template and general review
5	01/06/2020	General Review



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1.0 Purpose

The purpose of this Dangerous Goods Plan is to set out ASCO Australia requirements for storage and transporting Dangerous goods and cargoes within the Darwin Marine Supply Base. In addition, ASCO Australia will.

- Provide induction, information, education, training and supervision for all ASCO persons involved in the Storage or handling of dangerous goods
- Ensure that packages of dangerous goods are properly labelled
- Keep a register which contains a list of the dangerous goods and a MSDS for each, and make the register readily available to all persons at the DMSB
- Provide and maintain suitable personal protective equipment and other safety equipment for workers
- Prevent interaction of dangerous goods with incompatible goods
- Prevent contamination of food or personal products
- Eliminate ignition sources, where there is a risk of ignition arising from dangerous goods
- Contain spills or leaks, and clean them up immediately
- Prevent access by unauthorised persons.

2.0 Responsibility Summary

The following are the responsibilities in relation to this Dangerous Good Management Plan

Marine Supply Base Manager:

- To oversee the implementation of this Plan
- To monitor the activities of Facility Users to ensure compliance with this Plan.

MSB Coordinator & Facility Coordinator:

- Ensure competent advice and support is provided to Facility Users in meeting the requirements of this Plan
- To monitor controls in relation to this Plan.

HSSEQ:

- To review, update and implement any and all changes to this Plan
- To monitor all DMSB personnel and Facility users in relation to compliance with this procedure
- Carry out on site assessments in relation to this plan.

Employees:

- Will cooperate and assist with the Plan
- To follow all instruction in relation to this Plan
- To promptly report all non-conformances to DMSB Management.

Facility Users:

- Will cooperate and assist with the Plan
- To follow all instruction in relation to this Plan
- To promptly report all non-conformances to DMSB Management.

3.0 Abbreviations and Definitions

Terms	Meaning
AIMS	The AIMS (ASCO Integrated Management Systems) Manual is the top-



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	level document for all ASCO Group companies. It shall set the minimum standards, which shall provide ASCO personnel with guidance in meeting the principles of good business management
DG	Dangerous Goods
DMSB	Darwin Marine Supply Base
ETA	Estimated Time of Arrival
PPE	Personal Protective Equipment

4.0 Notification of Dangerous Goods

In line with the Darwin Port Dangerous Goods Port Notice (PN/003) The Darwin Marine Supply Base requires a minimum of Forty-Eight (48) hour's notification of dangerous goods or cargoes entering / leaving the DMSB, this includes:

- Load
- Unload
- Transit

Notification is not required for ship's stores. Please note that this does not include materials which are intended for use in commercial operations by a ship.

Dangerous goods notifications forms are available from; <https://www.darwinport.com.au/facilities-services/forms-permits> . Please email completed form to DangerousGoods@darwinport.com.au and MSBSecurity@ascoworld.com.

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

Note: The Harbour Master may reduce the notification period to 24 hours for dangerous goods or cargos being loaded in Darwin for an intra-state voyage provided the dangerous goods or cargos do not exceed the time limits in Section 17.

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 Blackwoods fields, a minimum of 18 hours prior to the vessel entering the Port of Darwin.

5.1 Failure to Notify

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

5.2 Packaged Dangerous Goods

For packaged dangerous goods the following must be provided:

- The name and Lloyds/IMO Number of the ship
- ETA of dangerous goods into DMSB
- Name of Agent, contact name and telephone number If containerised, the container identification number and type of packages
- Proper Shipping name/ correct technical name
- IMDG Code Classification and any subsidiary risk classification



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- UN Number (where applicable) Packing group (where applicable) Flash point (if applicable) Quantity
- The condition of the dangerous cargo,
- Any known defect that may adversely affect the safety of the port area, ship or environment
- Marine pollutant (where applicable) Date and times of the cargo operations

If a UN Number or Packing Group is allocated in the IMDG Code it must be provided in the application. When applying for Class 1 dangerous goods the following shall be included.

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

When applying for Class 7 dangerous goods the following shall be included.

- UN Number
- Proper Shipping Name
- Type of packaging
- The Hazard category of the package
- The Transport Index (TI)
- The names and activity of the radio nuclides
- 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.

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 at least 96 hours prior to arriving at the DMSB to allow for a risk assessment and for approval from a competent authority.

5.3 Bulk Dangerous Goods or Cargoes

For packaged dangerous goods the following must be provided:

- The name and Lloyds/IMO Number of the ship
- ETA of dangerous goods into port limits
- Name of Agent, contact name and telephone number
- Proper shipping name/correct technical name
- UN Number
- IMDG Code Classification and any subsidiary risk classification, with Packing Group or
- MARPOL NLS category and flash point as appropriate
- Quantity of cargoes to be unloaded/ loaded and those left on board
- For solid bulk dangerous cargoes, a certificate of manufacture.

For liquids and liquefied gases, whether the ship holds the following valid certificated as appropriate.

- International Oil Pollution Prevention Certificate
- International Pollution Prevention Certificate for the Carriage of Noxious Liquid



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- 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 (where applicable).

The condition of the dangerous cargo and any known defect in the cargo containment handling system, equipment or instrumentation that is related to the bulk cargo and that could lead to an abnormal hazard. Any known defect that could adversely affect the safety of the DMSB or port area, the ship or environment.

6.0 Identification of Dangerous Goods at the DMSB

ASCO Australia will monitor/record (DG Notification Forms) all dangerous goods stored and handled at the Darwin Marine Supply Base and any dangerous goods generated during the operations of the DMSB. All of these dangerous goods must be considered in the hazard identification and subsequent risk assessment process.

The following information should be assembled for each of the dangerous goods present:

- The name of the dangerous goods
- The Class, Subsidiary Risk and Packing Group
- If the dangerous goods are in packages, the sizes and numbers of packages of each size
- If the dangerous goods are in bulk, the identification numbers, capacity and average quantity of dangerous goods in each bulk container.

7.0 Obtain Information about Dangerous Goods

MSDS and markings on packages for all dangerous goods supplied to the DMSB will be reviewed to obtain information on the chemical and physical properties, hazardous properties, precautions for use and safe handling requirements for the dangerous goods.

When held in the same storage area, dangerous goods will be segregated from other dangerous goods or substances with which they are not compatible. Incompatible dangerous goods - for example, Class 5.1 oxidising agents and flammable materials - should separate by sufficient distance so that an incident in one will not involve the other.

Useful guidelines for segregation of incompatible dangerous goods is provided in Australian/New Zealand Standard AS/NZS 3833 *The storage and handling of mixed classes of dangerous goods in packages and intermediate bulk containers*.

7.1 Material Safety Data Sheet Information

ASCO Australia will receive MSDS for all dangerous goods covered by the Regulations, (DG Notification Forms) other than C1 combustible liquids. An MSDS is a document that describes the dangerous goods and provides vital information to help people use them safely. MSDS will be written in English and include the following information:

- the date of preparation or, if the MSDS has been reviewed, the date it was last reviewed
- the manufacturer's or first supplier's name and their Australian address and telephone number
- telephone number for information in the event of an emergency
- the product name of the dangerous goods, together with
- the proper shipping name, UN number, class, subsidiary risk and packing group
- its chemical and physical properties
- the names of the individual ingredients in the dangerous goods
- the proportion or proportion ranges of the ingredients identified with a chemical or generic name
- any relevant health hazard information, including first aid information



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- information on the precautions for the safe use of the dangerous goods
- a statement that the goods are dangerous goods.

For dangerous goods that may be unstable except under controlled conditions of storage and/or chemical composition, the MSDS must provide details of those conditions and specify the recommended proportion and safe limits for each chemical making up the dangerous goods. The MSDS should be clear and easily understood.

MSDS need to include the minimum information required under the Regulations. Formats based on the following are acceptable:

- Preparation of safety data sheets for hazardous chemical Code of Practice.
- An MSDS that has been prepared under corresponding legislation in another Australian jurisdiction that has substantially the same data set requirements as these Regulations.

8.0 Register of Dangerous Goods

ASCO Australia will keep a register for dangerous goods within the Darwin Marine Supply Base. The register is simply a list of the product names of all dangerous goods stored and handled by ASCO or Third Parties at the DMSB, where required, by the current MSDS for each of these dangerous goods. The only dangerous goods that do not have to be included in the register are:

- Dangerous goods in packages of a size that do not have to be marked under the ADG Code.
- Dangerous goods in transit.

The register will be maintained to ensure it is current. The register will be updated when:

- New dangerous goods are introduced to the DMSB
- The use of existing dangerous goods is discontinued
- The manufacturer, first supplier or supplier provides a revised MSDS

Manufacturers or first suppliers are required to review, and where necessary, revise MSDS at least every 5 years, all MSDS in the register or otherwise accessible in the Darwin Marine Supply Base should have issue dates within the last 5 years. If the use of a dangerous good is to be permanently discontinued, it will be removed from the register. Dangerous goods used periodically or seasonally do not need to be removed from the register.

The register will be readily accessible to any employee at the Darwin Marine Supply Base and any other person who is likely to be affected by the dangerous goods on the premises. The register will be kept in a central location, (DMSB Security Guardhouse).

NB*

ASCO will also monitor all third-party Dangerous Goods entering the DMSB premises for compliance to Dangerous goods legislation.

A *register* is not a *manifest*. A manifest provides information to the emergency services in the event of an emergency while a register provides information to assist in the management of dangerous goods within the Darwin Marine Supply Base.

9.0 Plan of the Premises and Storage

The purpose of the plan of the Darwin Marine Supply Base is to identify the places, buildings and structures on the site where dangerous/hazardous goods are stored and handled. It should be easy for emergency services authority personnel to read.

The plan of the DMSB should be on a scale that adequately illustrates the details required by the Regulations. The



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following information is required:

- locations and identification number or code of: - bulk containers and bulk storages; and storage areas for packaged dangerous goods and dangerous goods in IBCs; and areas where dangerous goods are manufactured; and areas where dangerous goods in transit may be located
- legend for the identification numbers and codes for the above areas
- main entrance and other entry points to the premises
- location of essential site services including fire services and isolation points for fuel and power
- location of the manifest for the premises
- location of all drains on the site
- Nature of the occupancy on adjoining sites or premises.

In addition, the following information may be relevant:

- the location of all buildings, amenities, structures and internal roadways within the Darwin Marine Supply Base and their uses
- areas of public access adjacent to the site and parking (if any).
- Nature of fences Storage
- Off wharf storage is at the sole discretion of DMSB Management.

Cylinders for gases

Where Class 2 dangerous goods are stored and handled in cylinders, ASCO Australia and Third Parties will comply with the relevant parts of AS 4332 The storage and handling of gases in cylinders.

In addition to the provisions of AS 4332, ASCO Australia and Third Parties will ensure that:

- Any cap provided for use with the cylinder is kept in place on the cylinder at all times when the cylinder is not connected for use
- Unless the container is connected by permanent piping to a consuming device, the valve of the container is kept securely closed at all times.

Container shall have the appropriate dangerous goods placard affixed and details of the substances contained within and will form part of the Plan of the Premises. Appropriate bunding maybe required.

Transfer of Dangerous Goods - Transfer of dangerous goods refers to the movement of the dangerous goods within the Darwin Marine Supply Base.

- From place to place within premises; and
- Into or from a container or storage area
- From vessel to port

It generally poses far greater risk than static storage. Additional hazards include:

- Increased vapor levels around the operation
- Generation of static electricity
- Overflow or spillage
- Spillage away from spill containment installations, such as where the transfer is by pipeline.

The transfer of materials will take into account:

- Hazards associated with the particular dangerous goods
- Required flow or transfer rates and quantities; and
- External hazards and adjacent activities.

If dangerous goods are transferred into a portable container for use at the Darwin Marine Supply Base, ASCO Australia will monitor third parties to ensure the container is marked with the Class label, Subsidiary Risk label and the product name of the dangerous goods, or, if this is not possible, by some other means of clearly identifying the



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dangerous goods. This is not required if the transferred dangerous goods are consumed immediately and the container is cleaned free of dangerous goods.

10.0 Spill Containment

ASCO Australia will provide spill containment (spill response unit land and first line response water) that will eliminate the risk or reduce risk so far as practicable from any spill or leak of solid or liquid dangerous/hazardous goods. This is required for every area where dangerous goods are stored and handled. All spillages or leaks of dangerous should be contained within the premises.

Factors that will determine the extent of spill containment include:

- the nature of the dangerous goods
- if liquid, whether it is mobile or viscous
- if solid, whether it will melt in a fire
- the quantity of the dangerous goods
- size of the largest container or largest spill
- the consequences of the spill
- Whether or not it is necessary to provide for the management of firewater or other extinguishing materials from an incident.

Spill containment for liquids may be achieved by

- providing drains to a purpose-built on-site catchment (for example, an interceptor or remote impounding basin)
- bunding the area to form a compound
- double walled containers
- enclosing a tank with a partial or full height bund
- Pallet bunding.

In some circumstances, it may not be necessary to provide any specific spill containment - for example, if the dangerous/hazardous goods are high melting point solids or highly viscous liquids (such as some paints, resins and adhesives) in packages that are small in relation to the size of the storage area.

10.1 Designing Spill Containment

ASCO Australia will ensure that:

- spill containment is impervious and can hold the dangerous/hazardous goods until the spills cleaned up
- the risks associated with the operation of the containment system are part of the design consideration
- the materials used in construction or for absorption are compatible with the dangerous/hazardous goods and other materials in the vicinity
- a compound is an area bounded by natural ground contours or by a bund, being sufficiently impervious to retain any spills or leaks of substances kept within the area pending the recovery of those spilled or leaked substances appropriate to avoid contamination of ground water or soil
- the capacity of any compound is sufficient for the volume of liquid (including a margin for fire water) to be contained
- separate spill containment is provided where goods that are not compatible are kept within the one storage area
- absorbent materials, barriers and booms are provided where needed to contain a spill outside areas where physical containment is provided or to assist in clean-up
- contaminated firewater can be removed during an incident if needed
- means are available for removing any rainwater that may accumulate in the area.



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<p>11.0 Risk Management</p> <p>ASCO Australia will control risks associated with the storage and handling of dangerous/hazardous goods at the Darwin Marine Supply Base. To do this effectively ASCO Australia identifies the hazards that contribute to the risks and assess the likelihood of those hazards causing injury or damage to property.</p>
<p>12.0 Consultation</p> <p>ASCO Australia will consult with employees and any other people engaged to carry out work at the Darwin Marine Supply Base who is likely to be affected by the dangerous goods, regarding:</p> <ul style="list-style-type: none"> • Hazard identification, risk assessment, risk control • Induction, information and training; and • Any proposed changes likely to affect their health or safety arising from the dangerous goods. <p>Consultation will take place as early as possible in planning the introduction of new or modified tasks or procedures associated with the storage and handling of dangerous goods to allow for changes arising from consultation to be incorporated. Consultative procedures should allow enough time for ASCO Australia HSSEQ Advisor to discuss the issue with relevant Darwin Marine Supply Base Personnel.</p>
<p>13.0 Training</p> <p>ASCO Australia will provide induction, information and training to any person at the Darwin Marine Supply Base who is likely to be affected by the dangerous/hazardous goods. This includes:</p> <ul style="list-style-type: none"> • Employees <p>ASCO employees will be provided training in line with the ASCO Australia Training Management Plan.</p>
<p>13.1 Outcomes of Training</p> <p>The required outcomes of training for employees at the Darwin Marine Supply Base include the ability to demonstrate an understanding of:</p> <ul style="list-style-type: none"> • Safe work practices relating to the storage and handling of dangerous/hazardous goods that are being used and stored at the Darwin Marine Supply Base • How to locate an MSDS, and use the information • The nature of the hazards and risks associated with the duties being performed • Measures used to control risk • Proper use of PPE • Emergency procedures • First aid and incident reporting procedures to be followed in case of injury or illness • Deployment of booms.
<p>13.2 Review of Training</p> <p>To ensure that training remains effective, ASCO Australia will regularly review the training provided to identify the need for further training. Further training should be provided when:</p> <ul style="list-style-type: none"> • There are changes to the layout of the Darwin Marine Supply Base, work practices or control measures for the dangerous goods • New information on the hazards of the dangerous goods is made available (for example, a revised MSDS).



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ASCO Australia will evaluate information, instruction and training to ensure that the content is clearly understood by employees. Evaluation will take the form of on-the-job observation. Refresher training should as required and induction training for all new employees (and other people engaged to carry out work at the Darwin Marine Supply Base).

13.3 Limitations of Training

Although training plays an important part in ensuring effective risk control, it is not a risk control measure in itself. People who are likely to be affected by the dangerous goods at the Darwin Marine Supply Base should be aware of the nature of the risk and the role that specific control measures play in risk prevention.

14.0 Emergency Plans

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 good or cargo is within the Darwin Marine Supply Base.

15.0 Signals

All ships carrying dangerous goods or cargoes whilst within Darwin Port limits are required to fly flag B.

16.0 Segregation of Dangerous Goods within the Darwin Marine Supply Base

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	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
Toxic gases	2.3	2	2	1	X	X	X	2	X	2	X	X	2	X	2	1	X
Flammable liquids	3	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)	4.1	4	3	2	1	X	X	X	X	1	X	1	2	X	3	2	1
Substances liable to spontaneous combustion	4.2	4	3	2	2	1	2	2	1	X	1	2	2	1	3	2	1
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
Oxidizing substances (agents)	5.1	4	4	2	2	X	X	2	1	2	2	X	2	1	3	1	2
Organic peroxides	5.2	4	4	2	2	1	2	2	2	2	2	X	1	3	2	2	
Toxic substances	6.1	2	2	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
Radioactive material	7	2	2	2	1	1	2	2	2	2	1	2	X	3	X	2	
Corrosive substances	8	4	2	2	1	X	X	X	1	1	1	2	2	X	3	2	
Miscellaneous dangerous substances and articles	9	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



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17.0 Segregation between Vessels

Segregation between vessels will be as determined by vessel loads (materials, fuels) and vessel maintenance requirements. Appropriate controls will be applied as per deemed necessary by DMSB Management team and HSSEQ department to ensure safety and compliance of all Facility Users; Minimum segregation between vessels undergoing hot works and adjoining vessels receiving class 3 flammables (methanol) will be 25m

18.0 Time and Berth Limitations within Port Limits

All Class 1 Explosives must be loaded or unloaded with 2 hours and adhere to the following Where 2 or more divisions of Class 1 Explosives are to be handled the separation, distance relating to the division with the most risk (greatest separation distance) is applied.

- Class 1 of all divisions 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 shall be unloaded as soon as reasonably practicable
- Class 1 of all divisions 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
- Class 1 shall not remain within the port area for more than 2 hours (with the exception of Division 1.4S on application)
- Class 1 Division 1.4S shall not remain within port areas for more than 24 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
- Repairs involving Hot Work shall not be permitted on the ship until the explosives have been removed. In the case of EAW, 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 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.

Ships Requirements.

- 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
- 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



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- 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
- Class 2.1 & 2.3, where the quantity exceeds 500kg must be off the DMSB within 12 hours
- Class 3, 4.1, 4.2, 4.3, 5.1, 6.1, & 8 of Packing Group 1 where the quantity exceeds 500kg must be removed from the DMSB within 12 hours. Note: If quantities are less than 500kg then the consignee may apply in writing for the dangerous goods to remain within a restricted area for up to 5 days dependant on operational requirements
- Class 7 Radioactive Substances must be removed with 24 hours from the DMSB.

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.

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

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.

Where the TI is greater than 50 of 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.

Storage - Off wharf storage is at the sole discretion of DMSB Management.

All other, than noted above, dangerous goods of Class 2, 3, 4, 5, 6, 8 and 9 can stay alongside for a period of up to 5 days. Consultation will be undertaken with the Port of Darwin Harbour Master and Darwin Port Operations for all required assessments when determining timelines of the above.

19.0 Management and Monitoring

ASCO Australia procedures that will be utilised to ensure control measures and monitoring are maintained, some examples are listed below:

- [GOP-HSSEQ-013](#) - Environmental Aspect Impacts Register
- [GOP-HSSEQ-014](#) - Environmental Review
- [GOP-HSSQ-039](#) - Monitoring and Measurement
- [GOP-HSSEQ-042](#) - Planned Inspections
- [GOP-HSEQ-046](#) - Service Improvement Process (SID)
- [GOP-HSEQ-047](#) - Task Based Risk Assessment

20.0 Personal Protective Equipment (PPE)

ASCO Australia will carry out risk assessments to help identify PPE requirements within operational areas of the Darwin Marine Supply Base, these risk assessments will assist in ensuring suitable and sufficient PPE Guidelines are in place in relation to this plan. But as a minimum all operational personnel must have ankle to wrist high viz clothing and the provision will be made for appropriate levels of additional PPE are available at all times.



Title: Dangerous Goods Management Plan (DMSB)

<p>All ASCO Australia employees, contractors and Visitors to the Darwin Marine Supply Base will be briefed on this plan to ensure all PPE measures are understood and complied with.</p>
<p>21.0 Employee, Client and Visitor Awareness</p>
<p>All ASCO Australia employees, contractors and visitors will receive a full induction to the Darwin Marine Supply Base to ensure all personnel are aware and comply with all plans and procedures to ensure safety and security of all personnel whilst on site.</p> <p>Consultation will take place between ASCO safety representative and personnel to ensure suitable and sufficient measures are installed to ensure compliance with this plan.</p>
<p>22.0 Non-Conformances</p>
<p>All non-conformances, objectives and performance standards not maintained will be investigated utilising the ASCO GOP-HSEQ-046 Service Improvement Process (SID) to ensure all non-conformances are investigated and suitable measures imposed to ensure satisfactory outcome.</p>
<p>23.0 Monitor and Review</p>
<p>The DMSB Dangerous Goods Plan will continually monitored to ensure full compliance with local and territory legislations, and as a minimum a full review will be conducted annually by the HSSEQ Department and/or DMSB management team to ensure compliance.</p>

Title: Dangerous Goods Management Plan (DMSB)

Appendix A - DMSB Emergency and Dangerous Goods Site Plan

