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FACT SHEET Number 02/2000

July 2000

DANGEROUS GOODS DOCUMENTATION

INFORMATION FOR SHIPPERS, PACKERS, SHIPPING LINES AND THEIR AGENTS

It has been reported that numerous problems exist in the way dangerous goods documentation is completed in Australia. Australian Marine Orders Part 41 (MO 41) requires certain documentation to be completed to enable shipment of Dangerous goods from Australia to comply with the International Maritime Dangerous Goods (IMDG) Code.

Attention is drawn to Marine Notice 13/1988 issued by the (then) Department of Transport and Communications. The following italicised text is extracted from the Notice: *The attention of all persons involved in the transport of dangerous goods, especially those contracting for the packing of cargo in freight containers, is drawn to the following extract from the Navigation Act 1912:*

“ 253A (2). A person shall not send by, or carry in, a ship any Dangerous goods which do not, or the packing, stowing or carriage of which does not, comply with the such requirements as are prescribed or are determined by the Minister in accordance with the regulations”.

Contravention of Sub-section 253A(2) constitutes an indictable offence and the Act provides for the imposition of a substantial fine up to \$10,000 as well as liability to imprisonment up to 4 years.

While the practice of sub-contracting the packing of freight containers is common, this does not relieve the shipper from the responsibility of ensuring compliance with the IMDG Code.

In addition, correct documentation for consignments of dangerous goods is essential so that those engaged in transport and handling are not exposed to risk. For this reason declarations as to packaging in accordance with the legal requirements, and container packing, should be entrusted to persons within the organisation directly responsible for supervising the packing and documentation.

To achieve an acceptable level of safety in the transport of dangerous goods, which in essence means compliance with the IMDG Code, personnel engaged in the packing operation and preparation of documents should be fully competent to perform these tasks. To this end training is a prerequisite and the Department takes the view that training is the responsibility of management.

Common Problems associated with Documentation

- Copies of Forms received by Australian Maritime Safety Authority (AMSA), the ship's Agent and the Master are often illegible.
- Forms are not completed in full, with some critical information listed below being left out such as :
 1. Shipper – name and address and 24 hour contact number
 2. Reference Number (Booking Reference Number)
 3. Consignee name and address and 24 hour contact number
 4. Carrier's name
 5. Name/Status, company/organisation of signatory to the Packing Certificate declaring that the packing of the container/vehicle has been carried out in accordance with the General Introduction, IMDG Code, paragraph 12.3.7 or 17.7.7
 - Place and date
 - Signature on behalf of packer
 6. Ship's Name and Voyage Number
 - Port of Loading
 8. Port of Discharge
 9. Description of Dangerous goods:
 - Marks and identification numbers or registration numbers of the unit
 - Details: -
 - i) the **Proper Shipping name** and *if applicable*, the words “**EMPTY CLEANED**” or “**RESIDUE – LAST CONTAINED**” before or after the proper shipping name for empty packagings, including portable containers or bulk packaging, which contain the residues of Dangerous goods, or the word “**WASTE**” before the proper shipping name for waste Dangerous goods (other than radioactive materials) being transported for disposal or for processing for disposal;
 - ii) the Class, the Division (if assigned), and the compatibility group and stowage arrangement for goods of Class 1; or the subsidiary hazards, if any, such as ‘flammable’, ‘oxidising agent’, ‘corrosive’, for goods of Class 2, or ‘**RADIOACTIVE MATERIAL**’ unless this appears in the proper shipping name, for goods of Class 7;
 - iii) The letters ‘UN’ followed by the UN Number shown for the goods in the IMDG Code (except for consignments identified as “Dangerous Goods in limited quantities of class/classes ...”), followed by the packaging group.
 - iv) The Class 7 schedule number for Class 7 materials;
 - v) If applicable, the minimum flashpoint if 61°C (cc.), or below, any subsidiary hazards not communicated by the proper shipping name, the identification “MARINE POLLUTANT” or “SEVERE MARINE POLLUTANT”.
 - vi) For cargo being transported under N.O.S. or generic entry listed in 7.1.10 of the Code, the recognised chemical name, of the cargo and/or marine pollutant(s) should be indicated in parentheses, immediately after the generic name.
 - vii) The control and emergency temperatures, if applicable, for Class 4.1 self-reacting substance or Class 5.2 organic peroxide.
 - The **proper shipping name, Class, UN Number and packaging group** (*where assigned*) should always appear in that order. Other items may appear in any order. See section 9.3 of the IMDG Code.
 - Unit quantity
 - Gross mass (kg) [in the case of goods of Class 1 – ‘net explosive mass’ of contents]
 - Cubic Volume (m³)
 - Goods Delivered as Breakbulk/unitized cargo or bulk packages
 - Type of unit – open/closed

Common Problems associated with Documentation (cont.)

10. Additional information: Any additional information required by 9.7.1 of the IMDG Code should be entered in Section 9 of the Form, overleaf or attached to this Form. Any special Certificates required by 9.7.2 of the IMDG Code must be attached to this Form.
11. Declaration that the contents of this consignment are fully and accurately described in the above Form by their proper shipping name(s), and are classified, packaged, marked and labelled/placarded according to the applicable international and national government regulations.
 - Signatory Company
 - Name of authorised signatory
 - Place and date of issue
 - Signature for and on behalf of the Shipper.

Please note that the IMDG page number should not appear on this Form.

REVISION of the IMDG Code

Amendment 30 to the IMDG Code will come into effect internationally on 1 January 2001. As this is a major revision, a transition period will be allowed until 31 December 2001. Marine Orders Part 41 will be amended to reflect this international requirement.

The IMDG Code is being completely reformatted to align it with the UN Model Regulations. As a result of the revision, all paragraph numbers in the Code will be changed. For ease of reference, the paragraph numbering used in the **current** text is used in this Notice. AMSA has advised that the current draft Chapter 5.4 of the reformatted IMDG Code – which is the chapter concerning Documentation – will be available in an electronic format as soon as possible.

Limited Quantities

Dangerous Goods in limited quantities (designated as in Section 18 of the IMDG Code) may be exempt from certain requirements in the IMDG Code due to the consideration that they are packed individually, in small quantities, which gives an acceptable level of safety through quantity limitations. The Code stipulates the maximum quantity per inner packaging and outer packaging (Inner packaging is the actual receptacle, which contains the commodity, ie. bottle or carton etc, Outer packaging is the outer enclosure, which contains a number of inner receptacles– ie. Fibreboard box or shrink-wrapped pallet etc. Note that a freight container is not an outer packaging). No mention is made of total quantity limitations. Any number of outer packagings, which individually meet the requirements of Section 18 of the Code, may be consolidated as part of a unit load and any number of unit loads may be stowed in a container or vehicle.

All contents within an outer package must be compatible, however, there is no segregation requirement between outer packaging and/or unit loads of Dangerous Goods in Limited Quantities or between Dangerous Goods in Limited quantities and other dangerous goods except where a specific segregation is included in the stowage section of the substance's individual schedule.

The goods described in **documentation must be declared as “Dangerous Goods in Limited Quantities”, where applicable, and documentation must be signed by the shipper, and/or the packer**, in the relevant places (Declaration(s) to cover compliance with IMDG Code including the compatibility within outer packages). **If not signed, the Australian Maritime Safety Authority may not authorise the shipment due to assumed incompatibility.**

Aerosols

The provisions of the IMDG Code do not apply to “Aerosols” that have a capacity of less than 50 cm³.

Packages and unit loads containing “Aerosols” (UN Number 1950) with capacity of more than 1 litre must be labelled with the label of Class 2.1, 2.2 or 2.3 according to the properties of the contents. If they are shipped as Class 2 Dangerous goods, there is no change from the packaging, stowage and segregation requirements and must be declared as Class 2 Dangerous Goods, including Division Number (ie 2.1,2.2,or 2.3 as appropriate), on all shipping documentation.

Depending on certain conditions (as enumerated in the IMDG Code), some aerosols with a capacity of 1 litre or less may not be subject to the IMDG Code. Those that are subject to the code may be shipped either as Class 2 Dangerous Goods (may be treated and segregated as if they are Class 9) or as Dangerous Goods in Limited Quantities providing they are declared as such.

Dangerous Goods in Limited Quantities is in accordance with Section 18 of the IMDG Code, providing the maximum gross mass of a package does not exceed 30kg (20kg for shrink-wrapped trays). If these aerosols are less than 1 litre, the mark ‘AEROSOLS’ may be applied instead of a label.

General Procedure

Notice of intention to ship Dangerous Goods

For the purposes of complying with the *Navigation Act*, a notice of intention to ship Dangerous goods must be made in accordance with Form MO 41/1.

If dangerous goods are to be shipped in a container or vehicle, a notice of intention to ship dangerous goods must also be made in accordance with Form MO 41/2.

For the convenience of the shipping industry, the Notice of Intention is published in three formats: MO 41/1, entitled IMO Dangerous Goods Declaration; MO 41/2, entitled IMO Container/Vehicle Packing Certificate; and a combined MO 41/1&2, entitled IMO Dangerous Goods Declaration and Container/Vehicle Packing Certificate. Users may use whichever best suits their purposes. Strict adherence to the layout of the forms is not necessary as long as all the specified information is provided. Shippers may use facsimile to deliver the Notice of Intention to AMSA.

A Shippers Declaration for Radioactive Materials may need to be used for certain Class 7 goods (Form MO 41/D). Shippers may obtain the electronic version of the Shippers Declaration for Radioactive Materials.

Who must give notice, and to whom?

If the packaged dangerous goods are to be shipped other than by container or vehicle or bulk liquid cargo is shipped, the **shipper** must send:

- (a) to the prescribed person – a completed Form MO 41/1; and
- (b) to the Master of the ship on which the goods are to be shipped – a copy of the Form sent to the prescribed person.

[Prescribed person means: in the case of a port where a marine survey office of AMSA is situated the surveyor in charge of that office; and in the case of any other port, the surveyor in charge of the marine survey of AMSA nearest to that port]

Who must give notice, and to whom?(cont.)

If dangerous goods are to be shipped by container or vehicle, but at less than full container or vehicle load (LCL cargo):

(a) the **Shipper** must send, in respect of the goods:

- (i) to the prescribed person – a completed Form MO 41/1; and
- (ii) to the consolidator of the container or vehicle in which the goods are to be shipped – a copy of the Form sent to the prescribed person.

(b) the **consolidator** must send, in respect of the container or vehicle:

(i) to the prescribed person

- (A) a completed Form MO 41/2; and
- (B) a copy of each Form MO 41/1 relating to the Dangerous goods consolidated in the container; and

(ii) to the Master of the ship on which the container or vehicle in which the goods are to be shipped – a copy of each Form sent to the prescribed person.

If dangerous goods are to be shipped by container or vehicle, as full container or vehicle load (FCL cargo) the **Shipper** must send:

- (a) to the prescribed person – a completed Form MO 41/1; and a completed Form 41/2; and
- (b) to the Master of the ship on which the goods are to be shipped – a copy of the Form sent to the prescribed person.

The relevant documentation may pass through several hands before the goods to which it refers are loaded aboard a ship. Where additional information is available, it should be added as appropriate. For example, the shipper may not know details relating to the shipping line, the place of loading, the container number, or the ship. These should be added by the freight forwarder, the consolidator, and the stevedore as appropriate. The form as received by the master must be complete in every detail.

(Forms MO 41/1 and MO 41/2 are now incorporated into one document entitled 'IMO Dangerous Goods Declaration and Container/Vehicle Packing Certificate'). **The shipper is responsible to complete the combined Form MO 41/1&2 and send a copy to the Master of the ship on which the goods are to be carried either directly or indirectly. If provided indirectly, each person to whom the Form is passed has the obligation to the Form's originator to pass it on to the next person till the Form reaches the Master of the vessel.**

Who is the Shipper?

The shipper is the person who first forms the intention of sending dangerous goods by sea. In most cases, it will be the maker of the goods, who exports them directly or through a freight forwarder or consolidator. Occasionally, however, the shipper will be a person who buys the dangerous goods in Australia from the manufacturer, a wholesaler, or even a retailer and then enters into contracts of sale to a person or persons overseas, or in another State, where transport will be by sea.

When Notice to be given

Forms that are required to be sent to the prescribed person, must be sent not less than 48 hours before the goods are loaded.

Forms required to be sent to the Master of a ship must be sent as soon as practical after arrival of the ship at the port of shipment, and in any case before the goods are presented for shipment.

Dangerous goods must not be loaded on ship until the Master, or a person appointed by the Master for this purpose, has received the Notice. The master may appoint a person to receive the Notices, but all Notices are to be given to the Master or a responsible officer before the ship sails.

Segregation of Dangerous Goods

General requirements for segregation between the various classes of dangerous goods are shown in Section 15.1.16 of the IMDG Code. Since the properties of substances or articles within each class may vary greatly, the individual schedules should always be consulted for particular requirements for segregation, as these take precedence over the general requirements. **Segregation should also take account of any subsidiary risk labels.**

Dangerous goods should wherever possible be stowed near the doors to be more easily accessible. The term “Away from” for the stowage of Break Bulk is more than 3 metres distant from each commodity that has to be segregated. In the case of containers, the interpretation of segregation “Away from” is left to the administration of the exporting country. **Considering that dangerous goods should be stowed as close as possible to the door of the container, the Australian Maritime Safety Authority has deemed ‘Away from’ as ‘not to be in the same container’.**

Stowage of Foodstuffs

- Foodstuffs (for either animal or human consumption) include Pharmaceuticals and extracts and flavourings falling into Class 3 or 8.
- Extracts and flavourings that fall into Class 3 or Class 8 are foodstuffs, and as such should not be stowed with Dangerous Goods as listed in the next point, even if they are of a similar class.
- Class 6.1, Class 2.3, Class 8 and Class 7 **must not** be stowed in the same container as “Foodstuffs”.
- Containers of “yellowcake” must be stowed “separated from” foodstuffs.
- All infectious substances (Class 6.2) must be stowed “separated by a complete compartment or hold from” all foodstuffs.

Special requirements for Class 1 substances (Explosives)

- For all Class 1 Cargo with the exception for Class 1.4S, an AMSA surveyor, prior to commencement of loading must inspect freight containers used to stow cargo.
- Where applicable containers must be lined in accordance with the Code requirements.
- Where applicable, requirements of the Australian Explosive Code (2nd Edition) may need to be met.
- A surveyor must inspect the stowage and securing of Class 1 cargo within the container or magazine prior to the container being sealed, or loaded on to a vessel.

(In NSW, the Work Cover Authority and the Port Authorities must also be notified when Class 1 cargo is to be handled)

Notification of Intention to Handle Dangerous Cargo

In addition to the MO 41/1, 41/2, and 41/1&2 forms mentioned above, AMSA also requires the use of two other forms. These are Form 41/3(a) (MO 41, provisions 7.1.2 and 7.3) and Form 41/3 (b) (provision 7.3).

Form 41/3(a) is required in all cases where:

- (a) any amount of dangerous cargo in Classes 1, 2.1, 2.3, or 7 is to handled;
- (b) more than 5 tonnes of dangerous cargo in any class is to be handled, or
- (c) more than 5 tonnes of marine pollutants are to be handled.

The form should be lodged by the agent or stevedore as soon as the details of the proposed loading, discharge or cargo handling are reasonably certain.

For the purposes of Form 41/3(a) dangerous cargo includes:

- ◆ any dangerous goods to which the IMDG Code is expressed to apply, whether specifically listed in the IMDG Code or not; and
- ◆ any bulk liquid which has a pollution category of A, B, C or D for the purposes of Chapter 17 of the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code) or a pollution category of D for the purposes of Chapter 18 of that Code.

Form 41/3(b) provides for a standard manifest for dangerous cargo. It should be used for all ports, which do not specify a particular format for the manifest. Where a port specifies a particular format, that format should be used in lieu of Form 41/3(b).

(In Sydney, *an Application for Approval for Vessel Conveying Dangerous goods to enter port, an Application to handle dangerous goods, and a Dangerous Goods List* are to be entered on the Dangerous Goods Module of the Central Booking System. This has to be done at least 24 hours prior to; the proposed time of entry of the ship into port or the container being delivered to the terminal for export cargo. All ports should be guided by the 24 hour notice requirement under the Australian Standard AS 3846-1998 *The handling and transport of dangerous cargoes in port areas*).

Inspection of Documentation

Provision 8.1 of Marine Orders Part 41 gives Australian Maritime Safety Authority surveyors to inspect, at any time:

- ◆ a ship loaded, loading or to be loaded with dangerous cargoes;
- ◆ dangerous goods loaded or intended to be loaded on a ship;
- ◆ a container loaded or intended to be loaded with dangerous goods for carriage on a ship; and
- ◆ the prescribed information relating to such dangerous cargoes.

Failure to provide **all** relevant information may result in the cargo being short shipped and all costs incurred as a consequence, being passed on to the account of the Shipper.

Shipping Lines should not at any time amend or add any pertinent information declared and signed for by the shipper, freighter forwarder or the consolidator.

Inspection of Documentation (cont.)

Any container that has a hazardous label affixed is considered to be a dangerous goods container by the Australian Maritime Safety Authority and other maritime administrations (whether it contains any cargo or not). The Australian Dangerous Goods and the IMDG Codes stipulate that dangerous goods labels are only allowed to be affixed during transportation of dangerous goods. Placarding on a container should not be misleading as to the contents of the container.

All placards relating to dangerous goods should be masked or removed from containers as soon as the contents are removed and the container is cleaned, unless the container is to be reloaded with goods of the same class or classes.

Shipping companies are entitled to charge for containers bearing placards at dangerous goods rates (where applicable) whether or not the container does contain dangerous goods. Moreover, if a container is received bearing a dangerous goods placard, and the way bill or manifest is not consistent, the shipping company (or stevedore on its behalf) will properly reject the container until the contents have been inspected and found to conform to the waybill or manifest.

If a container on which the exterior placard is not consistent with the declared contents is found to be loaded on a ship, AMSA may consider that the carriage of the container could endanger the safety of the ship or crew, and prohibit its carriage (in accordance with S254 of the Navigation Act) until the contents have been ascertained, and either the contents properly declared consistent with the placard, or the misleading placard is removed.

Electronic Lodgement of Documentation

All documentation relating to dangerous goods required to be provided to AMSA may be provided by e-mail, fax, or on paper. AMSA cannot, however, accept electronic lodgement in the Customs EDP or EDI formats.

As part of its requirements to implement the Electronics Transactions Act 1999, AMSA is reviewing its legislation and methods of provision of service to take into account the potential for online transactions.

The Electronics Transactions Act 1999 creates a regulatory regime permitting electronic communications to be used in transactions. The Act facilitates electronic commerce in Australia by removing the existing legal impediments that may prevent a person from using electronic communications to satisfy legal obligations under Commonwealth law. The Act will apply to all Commonwealth laws from 1 July 2001 unless specifically exempt.

PROCEDURES FOR SHIPPING LINES

Special List, Manifest or Stowage Plan

There must be available for inspection in a ship in which Dangerous Cargoes, including bulk noxious liquids, are to be carried, a Special List, Manifest or detailed Stowage Plan setting out:

- (a) before commencement of loading of the cargo, the intended location on board of each of the Dangerous Cargoes intended to be carried; and
- (b) not later than the time of getting underway and so long as the ship is carrying Dangerous Cargoes, the location of each of the Dangerous Cargoes on board,

and specifying in relation to each of the dangerous goods the information required by 9.10 of the IMDG Code.

A copy of the document referred to in (b) above is to be retained on shore by the owner or agent of the ship until the dangerous cargoes are unloaded, when the copy is to be forwarded to the prescribed person.

Stowage of Ammonium Nitrate and Ammonium Nitrate Fertilisers in containers

Ammonium Nitrate packed in containers may, as per the Code, be stowed under deck under certain circumstances. However, **If containers of Ammonium Nitrate are stowed under deck, the need to be able to open the hatches at sea in case of fire and the ability to apply fire-fighting water with the consequent risk to stability must be considered. Therefore, no containers or other cargo should be stowed on that hatch cover, and hatch opening mechanisms must be provided**

Fumigated Containers

Transport documentation associated with the carriage of cargo transport units under fumigation **must** show the date of fumigation, the type and amount of the fumigant used, and give instructions for the disposal of residual fumigant, including fumigation devices, if used. See 9.9 of the IMDG Code.

The intention of the Australian Chamber of Shipping Ltd (ACOS) is to increase the awareness of documentation requirements for dangerous cargo. While every effort has been made to ensure the contents of this document are accurate and clearly stated, ACOS and its employees and agents take no responsibility for any inaccuracies or omissions in this publication. The opinions expressed are those of the contributors and not of the Chamber. No warranty is given and no liability is accepted.



Our Ref: 022054

Mr K Athureliya
 Australian Chamber of Shipping
 Level 5
 6 Underwood Street
 SYDNEY NSW 2000

Dear Mr Athureliya

The transport of dangerous goods by sea is regulated in order to prevent, as far as possible, injury to persons, damage to property and the marine environment.

These objectives are achieved by the statutory requirements of the International Maritime Dangerous Goods (IMDG) Code which lays down the principles for classification, identification, packing, marking, labelling and placarding, documentation, stowage and segregation.

Of these principles, correctly prepared documentation is one of the most important because it identifies the goods and conveys fundamental information about the associated hazards. It is this information which determines the conditions under which a shipment of dangerous goods is to be made to ensure its safe carriage. The information is also used for a variety other purposes.

These include facilitation of an immediate response to fires or spills involving dangerous goods; the first-aid treatment of persons injured by dangerous goods, and the reporting of dangerous goods lost at sea to Coastal States so that appropriate action can be taken to counter pollution or any other threat caused by the loss.

Notice 02/2000 prepared by the Technical Committee of the Australian Chamber of Shipping (ACOS) is intended to promote compliance with the statutory requirements for the transport of dangerous goods by reminding persons involved of their obligations under the law.

AMSA as a safety regulatory authority congratulates ACOS and its Technical Committee on its endeavours and believes that publication of the Notice will make a positive contribution to the implementation of the IMDG Code. AMSA views the notice as supplementing its own efforts to ensure that dangerous goods are always safely carried by sea and welcomes the support given by ACOS in helping to achieve this objective.

Yours sincerely

A handwritten signature in black ink, appearing to read 'R. Timms'.

Roger Timms
 Acting General Manager
 Maritime Safety and Environmental Strategy

7 July 2000