

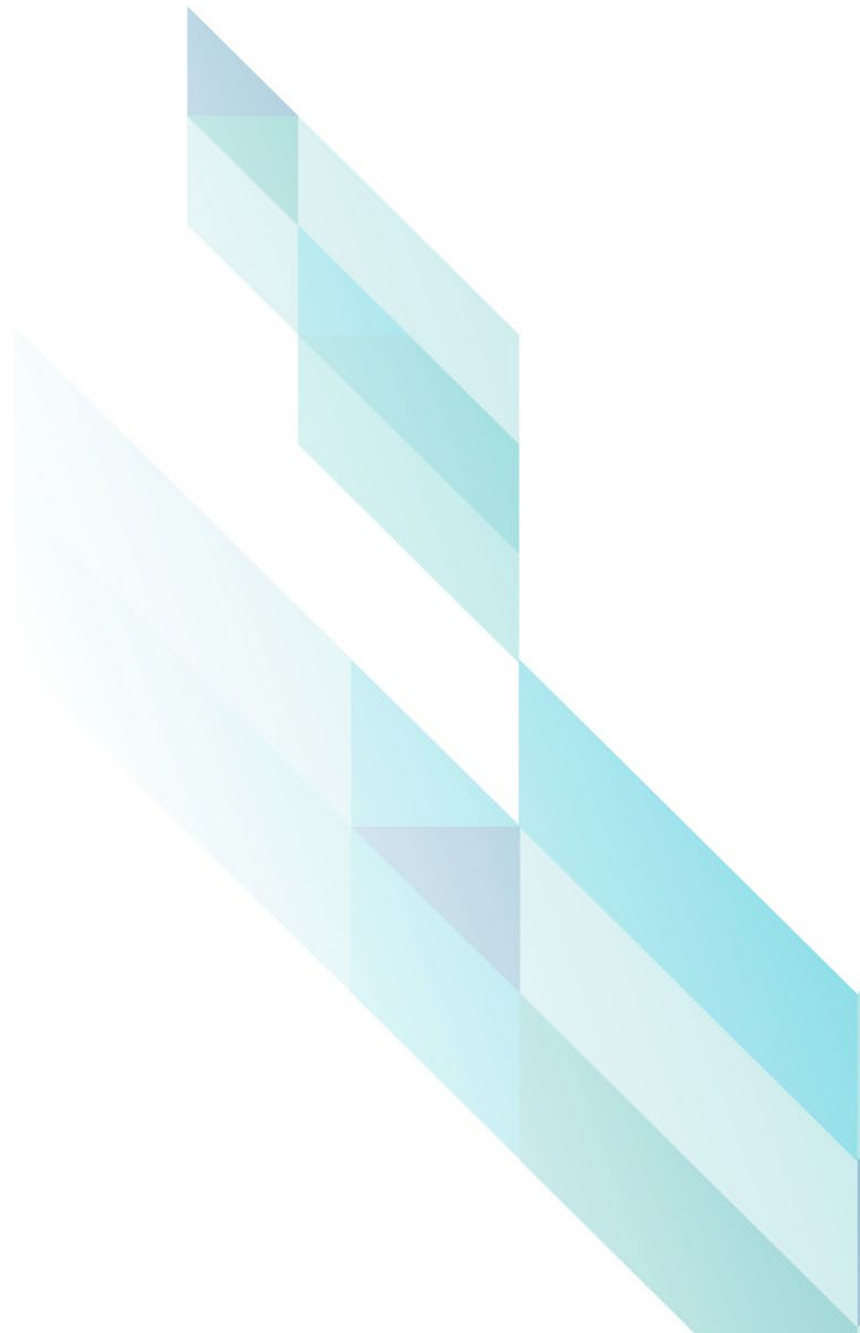


Australian Government

Australian Maritime Safety Authority

Dangerous goods procedure

Guidance: Marine Order 504 changes



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Dangerous goods procedure

From 1 June 2025, all domestic commercial vessels involved in cargo operations, including the carriage of dangerous goods, must have a procedure outlining how they manage the risks included in their safety management system (SMS).

What do we mean by cargo? For the purposes of Marine Order 504, vessel cargo does not include ballast for the vessel or goods intended for consumption or use on the vessel.

What do we mean by dangerous goods? For the purposes of Marine Order 504, dangerous goods means those packaged dangerous goods that fall within the application of clause 4 of the National Code of Practice for the Storage and Handling of Workplace Dangerous Goods (NOHSC: 2017 (2001)).

How to develop a dangerous goods procedure

You may already have a procedure for managing the handling, storing and transporting of dangerous goods. If so, use this as an opportunity to review your existing procedure.

This [dangerous goods procedure checklist](#) will help you identify any gaps.

Documentation: Developing the carriage of dangerous goods procedure involves:

- updating or reviewing your risk assessment
- updating your existing 'Dangerous goods procedure' or developing one.

Include the updated risk assessment and dangerous goods procedure a in your SMS.

Step 1: Find out state/territory requirements

Contact the [state/territory department](#) that is responsible for dangerous goods and find out their requirements.

Step 2: Conduct a risk assessment

The owner should conduct a risk assessment, with assistance from the master, crew and other staff where needed, taking into consideration the steps below and the class and quantity of dangerous goods carried on board.

a. Identify hazards

Identify the hazards associated with the type of dangerous goods you are carrying. This could include:

- **Chemical hazards:** Flammable, explosive, reactive, and toxic substances that can cause death, injury or harm to human health if swallowed, inhaled or by skin contact.
- **Physical hazards:** Risks related to how the crew handle and stow dangerous goods, including heavy lifting, slips and falls.
- **Environmental hazards:** Potential for, and severity of, environmental contamination in the event of a spill, leak, corrosion, fire or explosion.
- **Health hazards:** Risk to human health if toxic substances spill or contaminate the air, water or surfaces. This includes infectious substances such as pathogens like bacteria, viruses that are contained in or produced by medical or clinical wastes, infected animals, or decaying organic matter carried on board the vessel.

b. Assess risks

Evaluate the likelihood of an incident occurring and the potential severity of any consequences. These may relate to:

- **Exposure level:** How often and how long could a person be exposed to the hazardous substance?
- **Toxicity:** How much and how toxic are the dangerous goods you are carrying? How might that impact the severity of the emergency?
- **Severity of consequences:** How badly could this impact a person's health? The vessel? The environment?
- **Vulnerability:** Do you have vulnerabilities such as inexperienced crew? Specific environmental conditions? Areas where the vessel is more susceptible to damage? Do you carry the appropriate equipment and PPE?

c. Control the risks

Consider appropriate control measures that should be implemented to manage the risks you've identified. The hierarchy of controls identifies the most to least effective ways of doing this. Controls may relate to:

- **Elimination:** Physically removing the hazard from the vessel. It is the most effective way to control a risk because the hazard is no longer present.
- **Substitution:** Consider replacing the hazardous material with a less dangerous one.
- **Isolation:** Isolate the hazard from people by using barriers, taping off, or restricting an area.
- **Engineering controls:** Consider ventilation systems or secure containment areas for the dangerous goods.
- **Administrative controls:** Include safe handling practices, emergency response plans, placarding and regular safety drills.

- **Personal Protective Equipment (PPE):** Provide suitable protective gear to crew, such as gloves, goggles, and respirators, as a last line of defence.
- **Existing controls:** Review what you already have in place. How effective are these controls?

Step 3: Develop a procedure

Document a procedure for each of the controls within your 'dangerous goods procedure' and include this in your SMS.

Use this [dangerous goods procedure checklist](#) to identify any gaps.

Step 4: Monitor, review and revise

Once the procedure is in place, review it:

- at least annually
- if there are significant changes in the vessel's operations, such as new equipment or modified work processes
- if there are changes in the WHS laws, state and territory laws or other relevant regulations such as marine orders
- following an incident or near miss.

Note: The carriage of dangerous goods has implications for a vessel's certification. Under Marine Order 503 (Certificates of survey) the carriage of dangerous goods is both a modifier (increasing the survey frequency) and a transitional vessel trigger. As such, an existing vessel commencing the carriage of dangerous goods will become transitional. This will require compliance with the applicable sections of NSCV Section C4 – Fire safety concerning the carriage of dangerous goods.

New vessels will be subject to the requirements of NSCV C4 for the carriage of dangerous goods.

An application for initial survey will be required prior to the vessel commencing operations with dangerous goods.

For details on the dangerous goods carriage requirements, including fire control plan, fire safety operational booklet and training manual see [NSCV C4](#).

Checklist: Dangerous goods procedure

Answer the questions in the checklist to identify whether you have an appropriate procedure in place to manage the risks of carriage of dangerous goods in your operation.

If you answer **no** to any of the questions, and it's relevant to your operation, update your risk assessment, develop the related procedure, and include it in the 'Dangerous goods procedure' in your SMS.

Note: This is not a full list. You will need to work out other procedures that may apply to your operation.

Operational area	Dangerous goods procedure (if relevant)	In place?
Training crew	Does your procedure include training masters and crew in the safe handling, storing and transporting of dangerous goods, including emergency procedures?	Y/N
Pre-loading	Does your procedure include listing dangerous goods in a manifest, and ensuring they are correctly labelled, packaged and contained, with no visible signs of leakage or poor packaging?	Y/N
Segregation	Does your procedure include keeping cargoes separated from each other and away from sources of heat or ignition?	Y/N
Ventilation and temperature control	Does your procedure ensure adequate ventilation and temperature control where dangerous goods are being stowed?	Y/N
Secure handling and storage	Does your procedure for handling and storing dangerous goods minimise the risk of accident?	Y/N
Securing cargo	Does your procedure include securing cargo with lashings and strappings appropriate for the load and in accordance with your safety procedures (i.e. cargo securing manual and plan)?	Y/N
Vessel stability	Does your procedure ensure dangerous goods cargo does not exceed the vessel's stability load limits and is stowed in a manner that does not compromise the vessel's stability?	Y/N
PPE requirements	Does your procedure ensure that masters and crew have appropriate PPE to put on when handling, storing and securing dangerous goods?	Y/N
Signage	Does your procedure ensure all cargoes of dangerous goods are labelled properly and appropriate signage is included to inform crew and passengers of hazards?	Y/N
Emergency preparedness	Does your emergency response procedure for the carriage of dangerous goods outline: <ul style="list-style-type: none"> • how and when to use spill kits? 	Y/N

Operational area	Dangerous goods procedure (if relevant)	In place?
	<ul style="list-style-type: none"> • what to do if hazardous substances escape into the air, on deck, into the water etc? • regular practice drills to ensure masters and crew know what to do in an emergency such as a fire? • emergency equipment required for classes of dangerous goods on board e.g. respirators? • identifying through risk assessment, appropriate first aid kit contents that will support applying first aid for contact/injuries from hazardous substances e.g. eyewash solution. • ensuring access to onboard medical supplies in case of a dangerous goods emergency? • clear communication protocols for alerting medical and emergency response organisations? 	
Safety data sheets	Does your procedure for ensuring in-date safety data sheets available on board for the dangerous goods being carried, comply with the requirements set out by the manufacturer?	Y/N
Pollution response	Does your procedure include reporting pollution incidents to relevant authorities?	Y/N
Compliance	Does your procedure comply with state/territory requirements in the areas your vessel operates?	Y/N
<p>Remember: Contact the state/territory department responsible for dangerous goods where you operate, to confirm that your procedures meet their requirements.</p>		