

Dangerous Cargoes Fact Sheet

The Port of Fremantle is the major general cargo port for Western Australia, and the handling of dangerous cargoes is an integral part of its operations.

Dangerous cargoes are defined in the Australian Standard 3846 and generally include cargoes that may present a safety hazard to people or the marine environment. Strict controls are in place to ensure that these cargoes are handled safely in the port, and are moved promptly out of the port area.

Dangerous cargoes handled through Port of Fremantle

The majority of dangerous cargoes being transported through the Port of Fremantle are associated with the mining and rural industries and include:

- petroleum products
- corrosive liquids, such as acids and caustic soda
- ammonium nitrate
- speciality chemicals.

International aspects

The 1948 International Conference on Safety of Life at Sea (SOLAS) adopted the classification of dangerous goods and some general provisions relating to transport in ships.

In addition, the United Nations appointed a Committee of Experts on the Transport of Dangerous Goods to consider the international aspect of dangerous goods transport by all modes of transport. The resulting United Nations' *Recommendations on the Transport of Dangerous Goods* deals with the testing and classification of dangerous goods. Based on the classification, the type and method of packaging for each product is specified, together with appropriate package labelling.

The International Maritime Organisation's (IMO) Maritime Safety Committee co-operated with the UN Committee of Experts to establish an international code for the transport of dangerous goods by sea. The resulting *International Maritime Dangerous Goods (IMDG) Code* was approved and recommended to governments by the IMO in 1965.

The IMO also developed the *Recommendations on the Safe Transport of Dangerous Cargoes and Related Activities in Port Areas*. These recommendations have been aligned as closely as possible with the IMDG Code and include recommendations relating to products being transported in bulk.

Australian aspects

The *Australian Standard 3846: The handling and transport of dangerous cargoes in port areas* was developed in 1998. This standard was designed to complement the IMO recommendations.

The key elements of this Standard include:

- notifying port authorities of dangerous cargo shipments
- general requirements and procedures for the safe handling of dangerous cargoes
- segregating incompatible products
- time constraints for products on the berth (the higher the hazard the shorter the time the product may be kept on the berth)
- emergency response procedures, including fire fighting resources
- management systems to cover aspects such as training and communication.

In preparation for emergencies, a National Oil Spill Response Plan and a National Chemical Spill Response Plan have been developed by the Australian Maritime Safety Authority. These plans outline the process for dealing with spills and accidents and are designed to establish a framework for all States to develop their own response plans. The respective State plans integrate with the national plans and include a process for activating the national plans in the case of major accidents.

Western Australian aspects

The *Dangerous Goods Safety (Goods in Ports) Regulations 2007* came into effect on 1 March 2008 and cover all ports within Western Australia.

These regulations provide the legislative application of AS 3846 and outline the specific responsibilities of the different parties such as the berth operator, the vessel owner and the port authority.

The berth operator (who is usually the stevedore) has an obligation under the regulations to have in place a safety management system to control the risks associated with the handling and transport of dangerous cargoes in the port area.

For land transport from the port area, *the Australian Dangerous Goods Code for Transport by Road and Rail* applies until the product reaches its destination.

The Western Australia Hazmat Coordinating Committee coordinates the State response to emergencies involving hazardous chemicals. The Fire and Emergency Services Authority is the lead combat authority, with advice provided by safety and environmental experts.

Port of Fremantle aspects

The Port of Fremantle operates from two geographic locations:

- Inner Harbour, at the entrance to the Swan River, where the container trade is handled
- Outer Harbour at Kwinana, handling grain, petroleum, chemicals, fertilisers, alumina, mineral sands and other commodities.

In 1999, Fremantle Ports developed a *Dangerous Cargoes Standard* based on AS 3846. This document provides advice to the shipping industry regarding the application of AS 3846 to the Port of Fremantle including any quantity limits or time restrictions for dangerous cargoes in the port area and the responsibilities for the handling of dangerous cargoes through the port. Seminars were conducted with the

release of this document and berth operators were encouraged to establish a safety management system meeting the requirements of AS 3846.

Fremantle Ports' own safety management system includes:

- a comprehensive emergency response and evacuation plan for port areas
- emergency response training, including oil response drills
- a Security Centre staffed 24 hours a day with trained personnel
- auditing and monitoring of activities relating to dangerous cargo operations
- the use of a community notification system (PC COPS) operated through the Police Service.

Fremantle Ports regularly reviews its quantitative risk assessment for the Inner Harbour operations to ensure that the Environmental Protection Authority's public risk criteria are not exceeded as a result of the handling of dangerous cargoes through the port.

Summary

Various controls have been developed and improved over the years to ensure the transport of dangerous cargoes by sea is as safe as practicable.

In ports, the transport and handling of dangerous cargoes has traditionally been controlled through a variety of rules and guidelines. These have been consolidated by the *Dangerous Goods in Ports Regulations* which provide a comprehensive set of requirements based on the Australian Standard AS 3846 and clearly stipulate the responsibilities of key players in the transport chain.

Fremantle Ports has developed a *Dangerous Cargoes Standard* which describes how the regulations and the Australian Standard 3846 are to be applied in the Port of Fremantle. Fremantle Ports undertakes a monitoring and auditing role to ensure compliance with restrictions on quantities and holding times within the port area

If an incident occurs, a comprehensive emergency response system is in place, commencing with the berth operator's emergency response plan and linking to Fremantle Ports' emergency plan, the State hazardous materials emergency plan (Westplan Hazmat) and ultimately to the National Response Plan.

References

www.imo.org

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