

THE CONTINGENCY PLAN AND TRAINING OF PERSONNEL

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1 INTRODUCTION

1.1 Singapore is strategically located at the cross-roads for ships plying between the Asian/Pacific Region and the Middle East/European Region. In terms of shipping tonnage Singapore today ranks as the busiest port in the world. Oil tankers account for some 35% of the tonnage. Apart from being the world's busiest port it is also the world's third largest oil refining centre and a leading bunkering port.

1.2 In 1995, there were more than 100,000 ship arrivals to our port. Many ships, including tankers transit the Singapore Strait which lies south of the port limit. The Singapore Strait together with the Malacca Strait is one of the busiest watetways in the world, linking the South China Sea to the Indian Ocean. For safe navigation, the IMO adopted Routeing System covering the Malacca and Singapore Straits was implemented in 1981. In 1990 some \$40 million was spent installing the Singapore Vessel Traffic Information Service (VTIS) to monitor the shipping in the Singapore Strait. However, there is still the possibility of marine incidents occurring and resulting in oil spill. The potential of a major oil spill is always there. The discharge from ships in port and transitting through the Straits and pollution from other marine related activities also affect Singapore.

1.3 With the impending corporatisation and eventual privatisation of the Port of Singapore Authority, a new Statutory organisation called the Maritime and Port Authority of Singapore (MPA) was set up in February 1996. MPA is a merger of the Marine Department, the National Maritime Board and the part of the Port of Singapore Authority which looks after regulatory functions.

1.4 The functions of the new Maritime and Port Authority of Singapore include the following:

- a Promote the use, improvement and development of the port.
- b Regulate and control navigation of waters within the port limits.

- c Provide for, and maintain, adequate and efficient lighthouses, beacons, buoys and other navigational aids.
- d Disseminate navigational information.
- e License and regulate marine and port services and facilities.

- f Train seafarers and promote the development of merchant shipping.
- g Management of port waters to prevent sea pollution and co-ordinate clean-up operations.
- h Advise the Government on matters related to sea transport, marine and port services and facilities, and represent Singapore internationally in these matters.

2 OIL SPILL CONTINGENCY PLAN

2.1 The port is potentially vulnerable to oil pollution from the maritime activities and traffic. As such certain areas in the port ie recreational beaches, fish farms and marine resources (coral reefs) are sensitive to oil pollution. In view of this a two-prong approach is adopted ie PREVENTION AND PREPAREDNESS. Prevention in the form of measures and surveillance to prevent any incident and legislation. Preparedness is contingency planning.

3 PREVENTION

3.1 SURVEILLANCE

3.1.1 The sensitive and potential pollution threat areas are identified and subjected to surveillance. The surveillance is maintained as follows:

- a 24 hours patrol by Enforcement Inspectors, harbour pilots and crew members of marine craft.
- b Patrols by the Singapore Police Coast Guard and the Republic of Singapore Navy.
- c Reports from ships and harbour craft in the port.

3.2 LEGISLATION

3.2.1 Legislation exists to ensure that the polluters bear all reasonable costs for clean-up, minimise and restore the environment caused by oil pollution. In the event pollution is caused by negligence, provisions are in place to prosecute the polluter. The MPA enforces the provisions of the following Act and Regulations:

a Prevention of Pollution of the Sea Act 1990

Under the Act, any party causing the oil pollution in Singapore waters or any Singapore ships causing oil pollution elsewhere can be prosecuted. The guilty party is also liable for the costs of any reasonable measures taken to reduce, remove and prevent oil pollution. Payments of cost incurred if not paid after a reasonable period of notice may cause the vessel to be detained and sold. The penalty for contravention of this Act is a fine of up to \$500,000 or to imprisonment up to 2 years or to both.

b Prevention of Pollution of the Sea (Oil) Regulations

These regulations give effect to Annex 1 of Marpol 73/78 which regulates the prevention of pollution of the sea by oil. Penalty for contravention of any of these regulations is a fine of up to S\$10,000 or up to 2 years imprisonment or to both.

c Prevention of Pollution of the Sea (Reporting of Pollution Incidents) Regulations

These Regulations give effect to Article 8 and protocol of MARPOL 73/78 which requires a report to be submitted without delay to the affected coastal states of any incident involving oil or other harmful substances.

d Prevention of Pollution of the Sea (Reception Facilities) Regulations

These Regulations require preventive measures to be taken by shipyards, terminals and the PSA. They are to provide facilities for reception of oily residues so as not to cause undue delay to ships. A reasonable fee can be charged and they can specify reasonable conditions for using these facilities. Facilities have been built for receiving, treating and disposing oily spills, sludge, oily waste, dirty ballast and tank washing. This is managed by Singaport Cleanseas

Pte Ltd, a subsidiary company of the PSA in partnership with local shipyards.

e Prevention of Pollution of the Sea (Detergents and Equipment) Regulations

These Regulations require:

- I] Oil companies in Singapore (BR Caltex, Esso, Mobil, Shell and SPC) to assist the MPA in dealing with oil pollution in Singapore; and
- ii] All steel constructed tugs licensed under the PSA (Harbour Craft) Regulations, 1974, with an engine power of 750 kilowatts or more must have on board not less than 400 litres of an approved dispersant with means of spraying the dispersant. It must also have a pump capable of delivering 250 litres of water per minute.

f Merchant Shipping (Oil Pollution) Act 1981

This Act gives effect to the 1969 International Convention on Civil Liability for Oil Pollution Damage. Under the Act, the owners of ships will be liable for:

- i] any damage or contamination caused by any discharge or escape of oil into Singapore waters from a ship;
- ii] the cost of any measures reasonably taken to prevent or reduce any such damages caused by the discharge or escape of oil; and
- iii] any damage caused by any measures taken.

The Act also gives the MPA the powers to detain a ship which caused an oil pollution in Singapore waters and sell the ship if the situation warrants. The master, owner or the person-in-charge of the ship that commits an offence under the Act can be arrested.

Under the Act, ships carrying more than 2,000 tonnes of persistent oil in bulk as cargo are required to have a contract of insurance or security to cover the

civil liability against oil pollution before they are permitted to enter or leave Singapore. The penalty for not complying with the requirements is a fine not exceeding S\$200,000

4 PREPAREDNESS

4.1 CONTINGENCY PLAN

4.1.1 MPA has an emergency response plan to handle oil spills. The notification procedures comprise reporting, control, co-ordination and clean up operation. The oil contingency plan basically comprises 2 parts ie **STRATEGY AND OPERATIONAL PLAN**, as follows:

a Strategy

- * High Spill Risk Areas and resources at risk from oil spills are identified and charted.
- * Oil Sensitive Areas are identified and prioritised for protection.
- * Types of resources and equipment available for clean up are identified by organisation and location.
- * Manpower for deployment and Clean up availability.
- * Permanent and Temporary storage sites and the disposal routes.
- * Response Organisation structure and the parties to the plan.
- * Responsibilities of Oil Spill Control, the Spiller, Oil Terminal Operators & EARL.
- * Emergency Operations Committee
- * Communication Centres, Information Collection and Dissemination Centres.

* Operating Procedure for Combatting Oil Spill in the Straits of Malacca and Singapore.

b Operational Plan

- * Notification Procedures
- * Oil Spill Notification Form w Alerting Procedures
- * Guidance for determining response
- * Activating List
- * Mobilisation procedures in accordance with the Tier Response
- * Deployment of manpower and equipment for oil spill
- * Clean up operation procedures

4.1.2 The objective of any oil spill contingency plan is to respond effectively in the shortest possible time. The discharge of oil is to be stopped and the spill combatted so as to prevent it from being washed ashore or extending over a large area.

5 **TRAINING**

5.1 MPA personnel are trained in-house as well as by external parties as part of the Oil Spill Contingency Plan.. The training courses cover the following area:

- a Oil causes, fates & strategies
- b Use of Chemical Dispersants
- c Surveillance Tracking
- d Contingency Planning
- e Boom Deployments

f Media Management

g Claims and Compensation

6 CONCLUSION

6.1 MPA is committed to an effective and prompt response to assist in any maritime emergencies. It is only through training and continuous exercising of contingency plans that MPA with the concerted efforts of all other parties, can effectively deal with a real life incident.

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