


Malaysia Marine Department role in OSR 'Expectation and Challenges'

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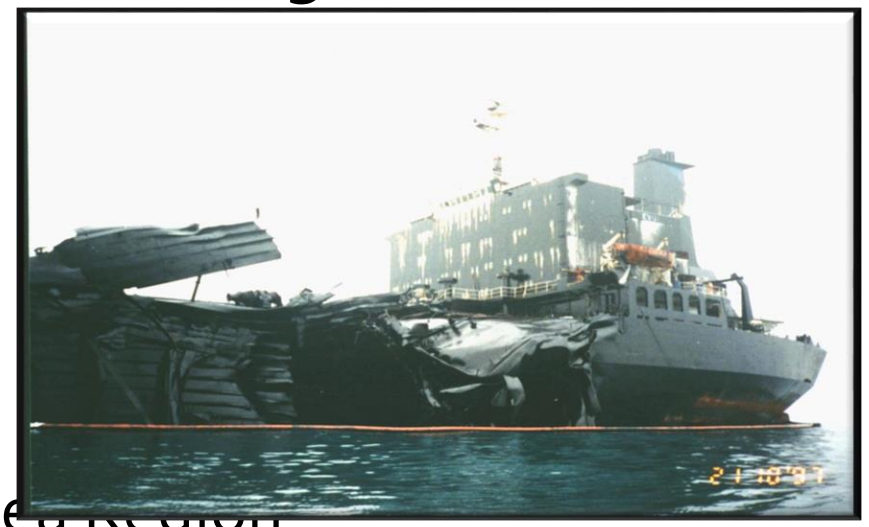
Malaysia Marine Department,
Sabah Region

MALAYSIA MARINE DEPARTMENT

- Marine Head Quarters - Port Klang
- 7 Region
  - Northern Region
  - Central Region
  - Southern Region
  - Eastern Region
  - Labuan and South China Sea Region
  - Sabah Region
  - Sarawak Region
  - 4 Division



NOSCC

Members of the National Oil Spill Control Committee (NOSCC) ;-

1. Department of Environment
2. Marine Department
3. Fisheries Department
4. Meteorological Services Department
5. Royal Custom and Excise Department
6. Immigration Department
7. Royal Malaysian Navy
8. Marine Police (PDRM)
9. Royal Malaysian Air Force
10. Aerial Unit PDRM
11. Ministry of Foreign Affairs
12. National Security Unit
13. Maritime Enforcement Coordination Centre
14 Fire Brigade and Rescue Department
15 Petroleum National Berhad (PETRONAS)
16. Petroleum Industry of Malaysia Mutual Aid Group (PIMMAG).
17. MMEA and 18.

Malaysia Marine Department

- The role of Malaysia Marine Department is to provide a technical advice related to vessels involved in oil spill and to do the inspections.

- Provide ships, staff and other facilities for oil spill operations and

- Enforcement as well as taking charge in combating oil spill.

Sources of oil pollution

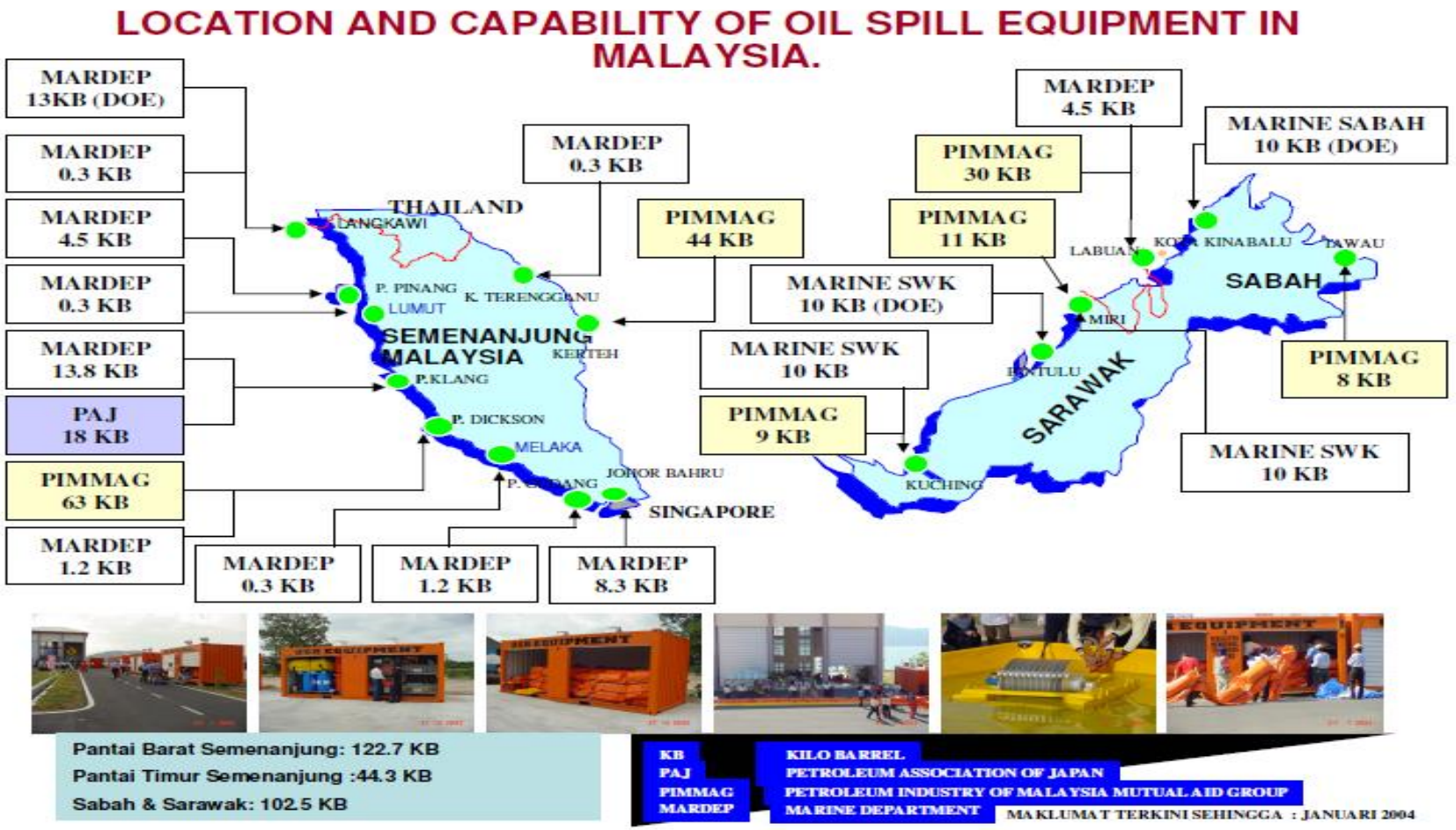
- The majority of oil pollution in the oceans comes from land.
- waste from cities, industry, and rivers carries oil into the ocean.
- Ships cause about a third of the oil pollution in the oceans when they wash out their tanks or dump their bilge water.

Equipment of oil Spill Response

- Malaysia has bought and maintains oil spill response equipment which will allow it to contain and clean-up a spill.

- These equipment are owned by Marine Department, Department of Environment , Petroleum Industry Malaysia Mutual Aid Group (PIMMAG), Petroleum Association of Japan, BOI Technology Holding Sdn. Bhd

OSR EQUIPMENT IN MALAYSIA



LOKASI STOKPILE PERALATAN KAWALAN TUMPAHAN MINYAK (OSRE) SEMENANJUNG MALAYSIA

Updated:
25 April 2008

LOKASI STOKPILE PERALATAN KAWALAN TUMPAHAN MINYAK (OSRE) PANTAI TIMUR MALAYSIA

Updated by DOE
25 April 2008

Major Oil Spill incident in Malaysia

Year	Name of the Vessel	Quantity Kilo barrel (Kb)/Tonnes
1975	MT Showa Maru	54/8 586
1976	Diego Silang	34/5 406
1992	MT Nagasaki Spirit	100/15 900
1997	MT Evoikos	175/27 825
1999	MV SS Sun Vista	14/2 226
2000	MT Natuna Sea	49/7 791
2011	MT Bunga Kelana 3	13/2067

MAJOR OIL SPILLS IN THE STRAITS OF MALACCA & SINGAPORE

Year	Name of the Vessel	Quantity Kilobarrel (Kb)	Passing Ship
1975	MT Showa Maru	54	-na-
1976	Diego Silang	34	-na-
1992	MT Nagasaki Spirit	100	-na-
1997	MT Evoikos	175	-na-
1999	MV SS Sun Vista	14	43 965 [0.03%]
2000	MT Natuna Sea	49	55 957[0.02%]
2001	-nil-	-nil-	59 314
2002	-nil-	-nil-	60 034
2003	-nil-	-nil-	62 334

MAJOR OIL SPILLS IN THE STRAITS OF MALACCA & SINGAPORE Vs GLOBAL OILS SPILLS

Year	Name of the Vessel	SOMS Oil Spills in Kb	Global Oil Spills in Kb
1967	MT Torey Canyon	-	74.5 [English Channel]
1975	MT Showa Maru	54	
1976	Diego Silang	34	
1989	MT Exxon Valdez	-	256.0[Bligh Reef, Alaska]
1992	MT Nagasaki Spirit	100	
1997	MT Evoikos	175	
1999	MV SS Sun Vista	14	
2000	MT Natuna Sea	49	
2006	MT Solar 1	-	13.0 [Guimaras & Iloilo, ph]
2007	MT Hebel Spirit	-	65.8 [Coast of South Korea]

Summary of Marine Pollution Cases Reported from 1 Jan – 15 Oct 2009

Month	Strait of Malacca	Strait of Johor	South China Sea	Sulu/ Sulawesi Sea	EEZ	TOTAL
January	0	0	1	1	0	2
February	0	0	1	0	0	1
March	0	1	1	0	0	2
April	0	0	0	0	0	0
May	0	3	1	0	0	4
June	0	7	0	0	0	7
July	0	0	0	0	0	0
August	1	1	0	0	0	2
September	0	0	0	0	0	0
October	1	0	0	0	0	1
TOTAL	2	12	4	1	0	19

10 KB

Pantai Barat Semenanjung: 122.7 KB

Pantai Timur Semenanjung :44.3 KB

Sabah & Sarawak: 102.5 KB

KB	KILO BARREL
PAJ	PETROLEUM ASSOCIATION OF JAPAN
PIMMAG	PETROLEUM INDUSTRY OF MALAYSIA MUTUAL AID GROU
MARDEP	MARINE DEPARTMENT

OSR VESSEL WEST M'SIA

Resources - Vessels

1 Unit – Langkawi

1 Unit – P.Klang

1 Unit – P.Dickson

2 Unit – Johor Baru

1 Unit – K.Terengganu

1 Unit – Labuan

Kapal OIL SPILL Landing craft

- TANJUNG KLIAS
- TANJUNG NOSONG
- Panjang : 24.00 m
- Lebar : 6.30 m
- Draft : 3.10 m
- IMO No. : -
- ON: -
- Call sign : 9WEA9
- Year build : 2000

TANJUNG ARU- Security

- Panjang : 24.00 m
- Lebar : 6.30 m
- Draft : 3.10 m
- IMO No. : -
- ON: -
- Call sign : 9WEA9
- Year build : 2000

KAPAL : CATAMARAN

- TANJUNG LIPAT- Kota Kinabalu
- TANJUNG SALUT – IPL
- TANJUNG SILAM – Lahad Datu
- TANJUNG SIAGIL- Tawau
- TANJUNG SUGUT – Sandakan
- Tanjung Putri- Kudat

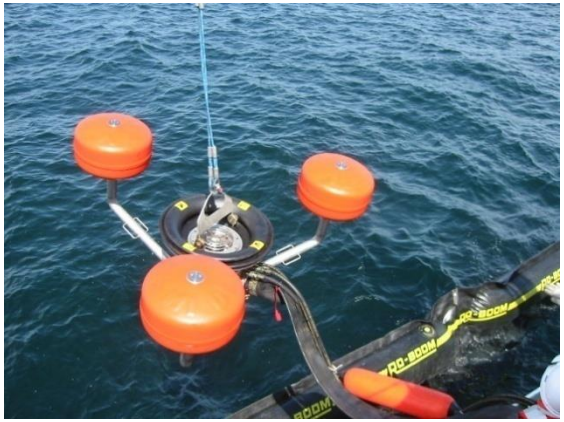
- Malaysia has adopted a three-tiered approach to all aspects of oil spill preparation and response.

- Local/ Industry (tier 1) - Tier 1 arrangements are established at individual ports and oil handling facilities, and are designed to deal effectively with small operational spills.
- Area/ Regional Councils (Tier 2) - Tier 2 arrangements provide for the pooling of government or privately owned resources at a local level or from a wider geographical area.
- The Department of Environment directing the national response efforts, all have clear roles and responsibilities in (Tier 3) - Tier 3 arrangements provide for a combined national or international response to a major oil spill that cannot be dealt with effectively under the Tier 2 arrangements. These Tiers are provided for the Environment Quality Act 1974 (Amendment 1996).

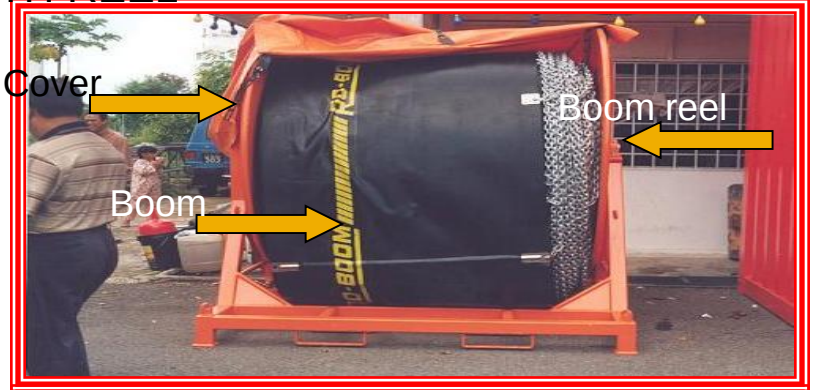
TINDAKAN BERPERINGKAT

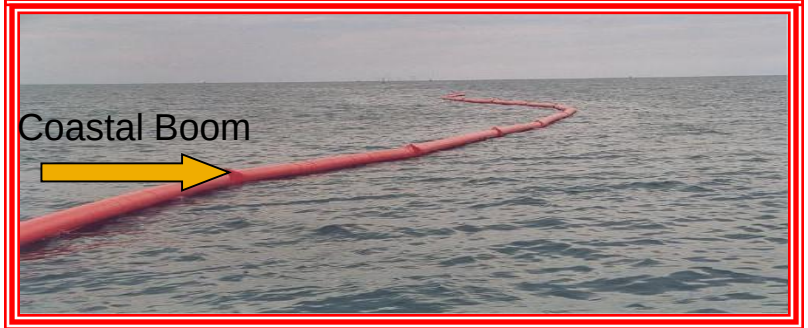
- Peringkat Pertama – Tindakan Tempatan (Tier 1) – Oleh Pengusaha tempatan
- Peringkat Kedua – Tindakan Negeri (Tier 2) – Oleh Pengerusi Jawatankuasa Operasi Negeri
- Peringkat Ketiga – Tindakan Wilayah (Tier 3) – Oleh Pengerusi Rancangan Kontigensi Kebangsaan Kawalan Tumpahan Minyak

Peralatan Tumpahan Minyak



1. OFFSHORE INFLATABLE BOOM WITH REEL





2. COASTAL BOOM WITH REEL

Boom diguna untuk contain, deflect dan mencegah minyak dari kawasan yang sensitif.

3. POWER PACK

50kW Power Pack

10kW Power Pack

Power Pack diguna untuk deployment of boom dan juga
Operate the skimmer juga diguna untuk blow angin
Kedalam boom.

4. PORTABLE AIR BLOWER

Portable Air Blower diguna
Untuk memasukkan angin
Didalam Boom.

12. PORTABLE VACUUM

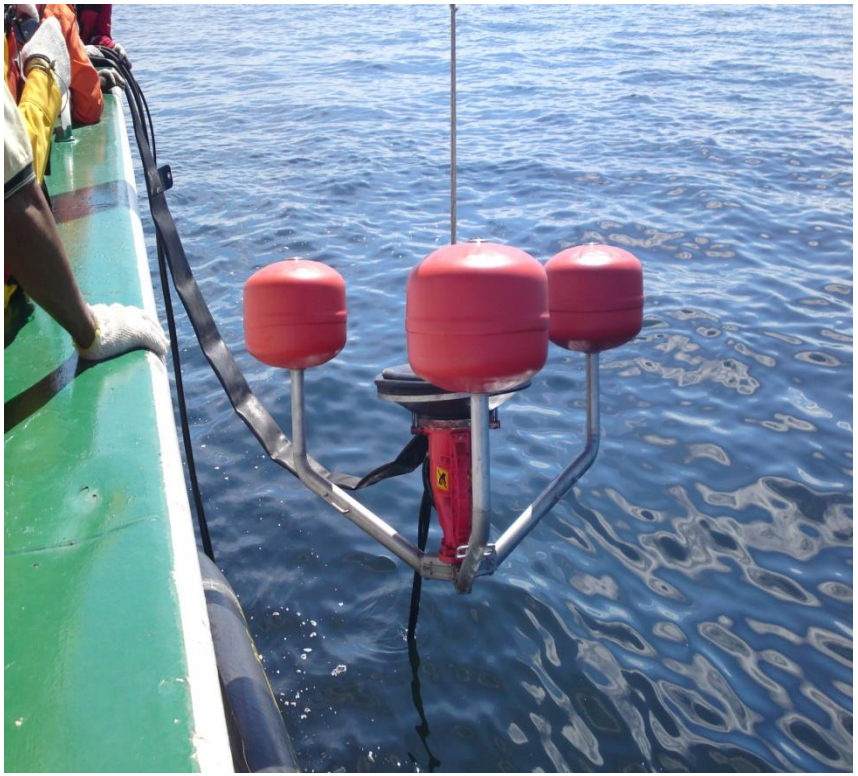
Latihan tumpahan minyak tahun 2011

Gambar latihan tumpahan minyak di laut

JENIS U DAN J (PUSINGAN)

SKIMMER

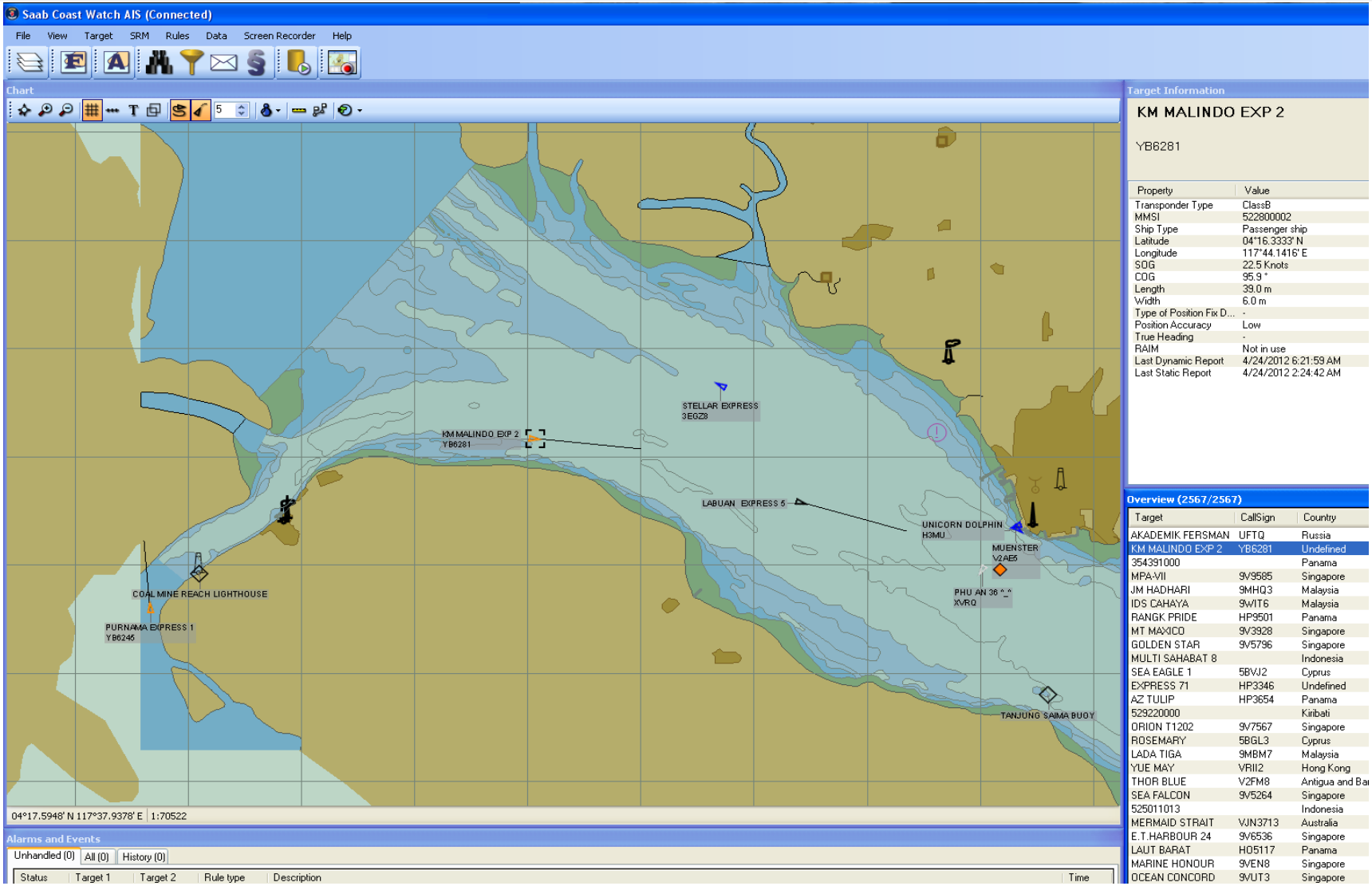
Gambar latihan tumpahan minyak di laut



Gambar latihan tumpahan minyak di laut

Gambar latihan tumpahan minyak di laut

Gambar Pergerakan feri Dalam Sistem AIS



PRVENTIVE MEASURES

- Experience shows that the best environment for pollution prevention comes from **good legislation and enforcement**

- **International Convention**

- Responsible for measures to improve the safety and security of international shipping and to prevent marine pollution from ships

  - This enforcement is carried out by both the Flag State Control and the Port State Control.

  - Malaysia is a Member of various International Convention such as MARPOL 73/78, SOLAS 74/88, Load Line 1966, STCW 1995 and COLREG 1972.

Safe Transportation

- *Ship Owner*

  The responsibility for maintaining a safe and seaworthy ship lies with the ship owner. This is a legal duty which the ship owner cannot delegate. The ship owner is the person in control of the vessel, and has responsibility for its operation, maintenance and manning.

- *Ship Registry*

  All ships must be registered in a given country (known as 'State'). The State where a ship is registered is known as the Flag State. It is the unique responsibility of the Flag State to ensure that the vessel complies with its laws and regulations and all applicable international regulations

MODERN TECHNOLOGY

Modern Platform Design

- The risk of major oil spill from an offshore platform, although not impossible, is very low.
- With the modern emergency shut-down systems employed on modern day platforms, risk of such occurrence is dramatically reduced.

Modern Pipeline System

- Modern technologies of pipeline construction, routing and marking of pipelines have significantly reduced the number of major spills.
- This can involve sophisticated leak detection systems relying on oil flow and pressure.

Shipping Industry Responsibilities

The oil and shipping industries have contributed directly to ship integrity and operational improvements not just in compliance but also in leading the way in innovative techniques and systems which complement the statutory requirements of national and international regulatory

a) *Safe Voyage*

The voyage will take place within a given regulatory framework, determined in part by the loading and discharge port but also by the Flag State of the ship.

b) *Ship Selection and Chartering*

It is the responsibility of the ship owner to nominate a safe and seaworthy ship that complies with all relevant international and national regulations.

Safe Navigation

In the way to prevent collision and grounding, Malaysia had followed International recommendation by providing Vessel Traffic System and Aid to navigation.

a) Vessel Traffic System (VTS)

As we all know, straits of Malacca is one of the busiest straits in the world. Vessels Traffic System (VTS) have be introduced to monitor and managed the busy straits. Marine Department is responsible to monitor all vessels passing the strait and to make sure every passing vessels comply with the rule.

b) Aid to Navigation

Aid to navigation is purposely introduced to guide mariners use the proper course to their destination and to avoid vessels from collided with other vessel and grounding.

Expectation

- Malaysia is Maritime country
- Over 3450 km shore line
- Heavy traffic in Strait of Malacca
- Border country with Singapore, Indonesia, Brunei Darussalam and Philippines.
- More than 6,000 vessel passing through Straits of Malacca
- Marine park in Malaysia- Sipadan, Mabul, Sapi, Tioman, Pemanggil and many more.

Expectation

- New development of deep water exploration especialy at South China Sea.
- New Oil and Gas terminal (SOGT – Kimanis)
- Single Buoy Mooring activity
- Crude oil transfer from FPSO and Ship at high sea.

Challenges - oil spill combating

- Limitation on asset such as OSR vessel
- Limitation on OSR Equipment
- Limitation on expert in operating oil spill equipment.
- Multitasking officers (dedicated task),.
- Transfer and changes of officer.
- Irrelevant location of OSR equipment
- Lack of training for OSR operator
- Inappropriate coordination between agencies
- Limitation of financial fund during oil spill combating.

- Effect a lot of money
- Lack of new technology
- Challenging in response operation
- Limitations of cleanup techniques
- Lack in technical knowledge
- No interested parties in the country
- No experienced technical and scientific advisors
- No variety and limitations of equipment
- Lack of contingency planning meetings and exercises

Conclusion

- More training between agencies
- Coordination between agencies and need to improve
- Contingency Plan – Improve (Exercise and drill)