



Introduction : Marine Pollution

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WHO WE ARE 2



Mohd Fairoz Rozali

- Graduated with a Degree in Mechanical Engineering (Marine Technology) from UTM in 1998;
- Earned a Master Degree in Maritime Affairs specialization on Maritime Safety and Environmental Protection (MSEP) from World Maritime University (WMU) in 2006;
- Held various functions and responsibilities in the department, including as a Ship Surveyor, Port State Control Officers, Assistant Ship Registrar and certified auditor for ISM & ISPS Convention.
- Currently - Principal Assistant Director of the Marine Environment Protection Unit, Safety of Navigation Division

- Contributions includes members to the Delegation for Malaysia to the International Oil Pollution Compensation (IOPC) Fund Meetings, IMO Meetings, ASEAN Maritime Transport Working Group (MTWG) Meetings, Chairperson to the Marine Environment Protection Technical Working Group under the Tripartite Technical Experts Groups (TTEG) Meeting in the Straits of Malacca and Singapore (SOMS), and Series of the Cooperative Mechanism on Safety and Environmental Protection in the SOMS since its establishment in 2007;
- Part of the member to Malaysia's delegation towards the establishment of the Cooperative Mechanism between the Littoral States and User States on Safety of Navigation and Environmental Protection in the Straits of Malacca and Singapore in 2006 & 2007;
- Involved in oil spill incident – MV Nautica Maharani, MV Wan Hai vs APL Denver, MV Putri Sea, GT5, Sinica Greca vs Chemroad;

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Content



- Introduction;
- Synopsis;
- Marine Pollution;
- Area of Responsibility & Legislation;
- Discussion;
- Conclusion;

- Quote of the Day -

“A candle loses none of its light by lighting another candle”

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Introduction



- About **70%** of all marine pollution originates from land, **10%** from maritime transportation and another 10% from dumping at sea.
- Pollution :-
 - Land based;
 - Vessel based;

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Introduction



- Land-based pollution
 - Consequences of urbanization and industrialization along the coast line;
- Vessel-based pollution
 - Marine pollution from sea-based activities is an “attention grabber”, especially when it involves oil spills.
 - Some effects of pollution from sea activities particularly oil spills are highly visible – oil covered wildlife, oily coastline, ecosystems highly vulnerable to pollution, etc.
 - Human costs i.e., loss of income and livelihood.

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Synopsis



- The Sept 2011 :-
 - Occurred along a 300 m stretch of coastal area along the west coast of the Tanjung Piai National Park.
 - Recorded about 3 – 6 inches of oil on the muddy area.
 - Had to mobilise a *Action Plan on Coastal Cleanup*.





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Synopsis

- The June 2012 incident :-
 - Happened on 26 June 2012, along a 1.2 km stretch of coastal area along the coastal areas of the Tg Piai National Park.
 - Estimated 5 ha of area badly degraded due to the incident.
 - 1.8 ton oil collected with assistance from about 300 volunteers.





Kos bersihkan burung : RM20k/burung

Synopsis Recent Oil Spill Incidents & Illegal Discharge

No	Date of incident	Name and IMO No. of the ship	Flag State	Name of port or location of incident (Lat/Long)	Type of substance spilled	Quantity spilled	Remarks and action taken	Consequences for marine environment
1	3/1/2017	APL Denver vs Wan Hai 301	Liberia Vs Singapore	Waterfront, Johor Port Berhad	MFO	50 MT	Response, Recovery, Spray dispersant	Mangrove, Mussel Farm, Fisheries & Socio Economy
2	15/6/2017	Putri Sea	Equatorial Guinea	Pasir Gudang	MGO	Unconfirmed amount	Response & Recovery	Fisheries & Socio Economy
3	18/8/2017	MT Sinica vs Chemroad Mega	Majuro Vs Panama	Tompok Utara, Pengerang, Johor	MFO	270 MT	Response & Recovery	Fisheries & Socio Economy
4	22/8/2017	MT Triple Joy vs MV Assosa	Malaysia vs Ethiopia	Port Klang	MGO	200 Litres	Tier 1	Fisheries and Flora Fauna

Synopsis

Recent Oil Spill Incidents & Illegal Discharge



No	Date of incident	Name and IMO No. of the ship	Flag state	Name of port or location of incident (Lat/Long)	Type of substance spilled	Quantity spilled	Remarks and action taken	Consequences for marine environment
1	3/1/2018			Straits of Malacca		(Illegal Discharge)	Oil Spill Simulation	Fisheries
2	15/1/2018			Straits of Malacca		(Illegal Discharge)	Oil Spill Simulation	Fisheries
3	11/3/2018			Johor Coast Line	Tar Ball	(Illegal Discharge)	Oil Sampling & Beach Cleanup Activities	Resort & Tourism Activities

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Synopsis

- Ship To Ship (STS) Activities
 - Tg Pelepas Port Limit;
 - Batu Pahat Port Limit;
 - Kuala Linggi International Ports;



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Marine Pollution



► What is Marine Pollution ??

“The introduction by man, directly, or indirectly, of substances or energy to the marine environment resulting in deleterious effects such as: hazards to human health, hindrance to marine activities, impairment of the quality of seawater for various uses and reduction of amenities”

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Marine Pollution



► IMO Perspectives??

- Accidental spills from ships carrying hazardous substances, oil, gas etc;
- Leaks from facilities such as marine terminal, harbours, offshore drilling platform, etc;
- Oily discharges from ballast water and bilge water during routine ship operations and illegal dumping of solid waste;
- Designated dumping grounds at sea (dredged spoil, old munitions, sewage sludge, fly ash, oil based drilling muds);

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Marine Pollution



■ Type of Marine Pollution

- Oil;
- Energy (thermal and light);
- Sewage;
- Solid Waste;
- Sedimentation;
- Biological;

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Marine Pollution



■ Potential Results of Pollution

- A reduction of biodiversity;
- Stress on population that are already threatened or endangered;








- In general, marine pollution affects ecosystem health, public health, recreational water quality and economic viability in the several ways such as mechanical, toxicity and mutagenic;

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Legislation

Akta Fungsi-Fungsi Menteri 1969

- Perintah Menteri-Menteri Kerajaan Persekutuan (P.U.A 184) bertarikh 26 Jun 2013 – JLSM, JL Sarawak dan JL Sabah

-  Keselamatan Kapal
-  Pendaftaran & perlesenan kapal-kapal
-  Pemeriksaan Kapal-kapal
-  Menyelaraskan operasi kargo berbahaya
-  Melaksanakan pelan kontigensi melawan tumpahan minyak dari kapal
-  Kerja pengerukan dan kerja pengukuran hidrografi
-  Program pembangunan dan pensijilan pelaut





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Legislation

Akta Fungsi-Fungsi Menteri 1969


- Perintah Menteri-Menteri Kerajaan Persekutuan (P.U.A 184) bertarikh 26 Jun 2013 – Jabatan Alam Sekitar

-  Melaksanakan fungsi dan kuasa di bawah Akta Kualiti Alam Sekeliling 1974
-  Melaksanakan fungsi dan kuasa di bawah Bahagian IV Akta Zon Ekonomi Eksklusif 1984
-  Pencegahan dan pengawalan pencemaran alam sekitar
-  Perlindungan dan pembaikan kualiti alam sekitar



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Legislation National Law



Reg 27 & 29


JABATAN ALAM SEKUTER MALAYSIA

Department of Environment

- Environmental Quality Act, 1974 (Act 127);

Marine Department Malaysia

- Part VA, Merchant Shipping Ordinance 1952
- Merchant Shipping (Oil Pollution) Act 1994
- Merchant Shipping (Amendment and Extension) Act 2011 – Act A1393



PORT KLANG Malaysia

Port Authorities & Other Related Government Agencies

IMO Reporting (MEPC .1/Cir 318)

Ship Statutory Certificate & Mandatory Plan specified as per MARPOL 73/78

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Legislation National Law – Part VA, MSO 1952



- Amendments Act A1393 which covers Malaysian waters, EEZ and atmosphere;
- Section 306B – Applicable to :-
 - Registered Malaysian ships;
 - Foreign ships while in Malaysian waters;
 - Fishing vessels; and
 - Such vessels or class of vessels as the Minister may prescribe (i.e floating structure, platforms, offshore structures);
- Ships of war, troopships & government vessels exempted;

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Legislation

National Law – Part VA, MSO 1952



- Section 306C (1) – Definition :-
 - “discharge” means any release of oil or harmful substances from a ship includes any escape, disposal, spilling, leaking, pumping, emitting or emptying, but does not include :-
 - Release of harmful substances or chemicals for purposes of legitimate scientific research into pollution abatement or control;
 - Dumping within the meaning of the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matters 1972, or dumping with the consent of the Government; or
 - Release of harmful substances directly arising from the exploration, exploitation and associated offshore processing of seabed mineral resources;

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Legislation

National Law – Part VA, MSO 1952



- Section 306C (1) – Definition :-
 - “oil” means any persistent or non persistent hydrocarbon mineral oil in any form, including any mixture with any oil content, whether carried on board a ship as a cargo in bulk or in bunkers of the ship;
 - “oil mixture” means a mixture with any oil content;
 - “owner” includes a charterer or operator of a ship;
- Section 306C (2) – Where oil or harmful substance has been, is being or is likely to be discharged, intentionally or otherwise, from a ship, the discharge or likely discharge of the oil or harmful substance from the ship shall, for the purpose of this Part, be deemed to be an escape or likely escape of oil or harmful substance from the ship;

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Legislation

National Law – Part VA, MSO 1952



- Section 306D (I) requires that
 - "where oil or harmful substance is escaping from, or where the Director of Marine is satisfied that **oil or harmful substances** is likely to escape from, a ship, then, for a purpose of preventing or reducing the extend of the pollution or likely pollution by the oil or harmful substance of any Malaysian waters, any part of Malaysian coast or any Malaysian reef, the Director of Marine with consultation of DG of the DOE, by notice in writing addressed to the owner of the ship and served in accordance with section 306E, do all or any of the following :-
 - Require such notice to be taken in relation to the ship or its cargo as is specified in the notice;
 - Prohibit the removal of the ship from a place specified in the notice except with his approval; and
 - Prohibit the removal of the ship or any cargo, or any cargo specified in the notice, except with his approval;

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Legislation

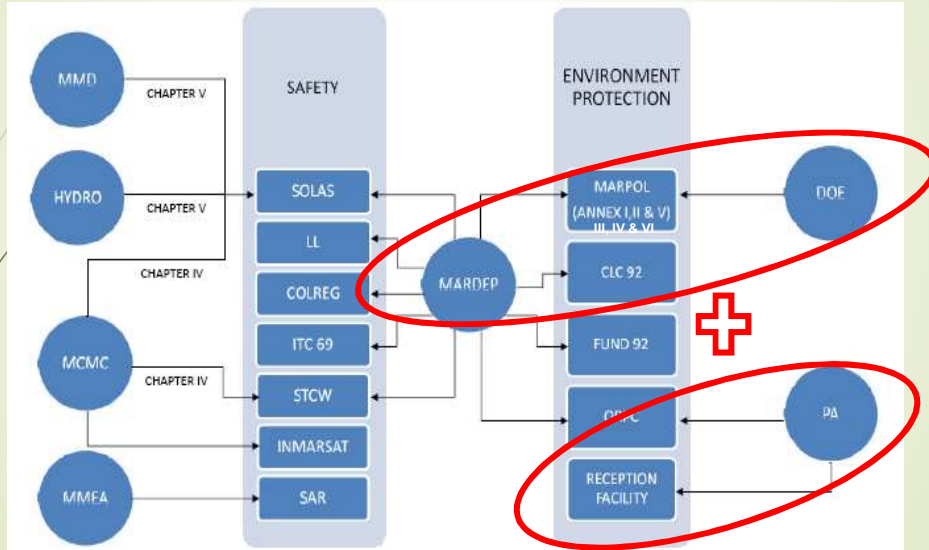
National Law – Part VA, MSO 1952



- Section 306J (I) requires that
 - "the master of a ship in Malaysian waters which experiences a maritime casualty as defined in the Section 306I or which has discharged any oil or harmful substances shall report incident to :
 - The Port Officer, within twenty-four hours or as soon as possible, where the ship is in port; or
 - The Director of Marine, as soon as possible, where the ship is outside a port;

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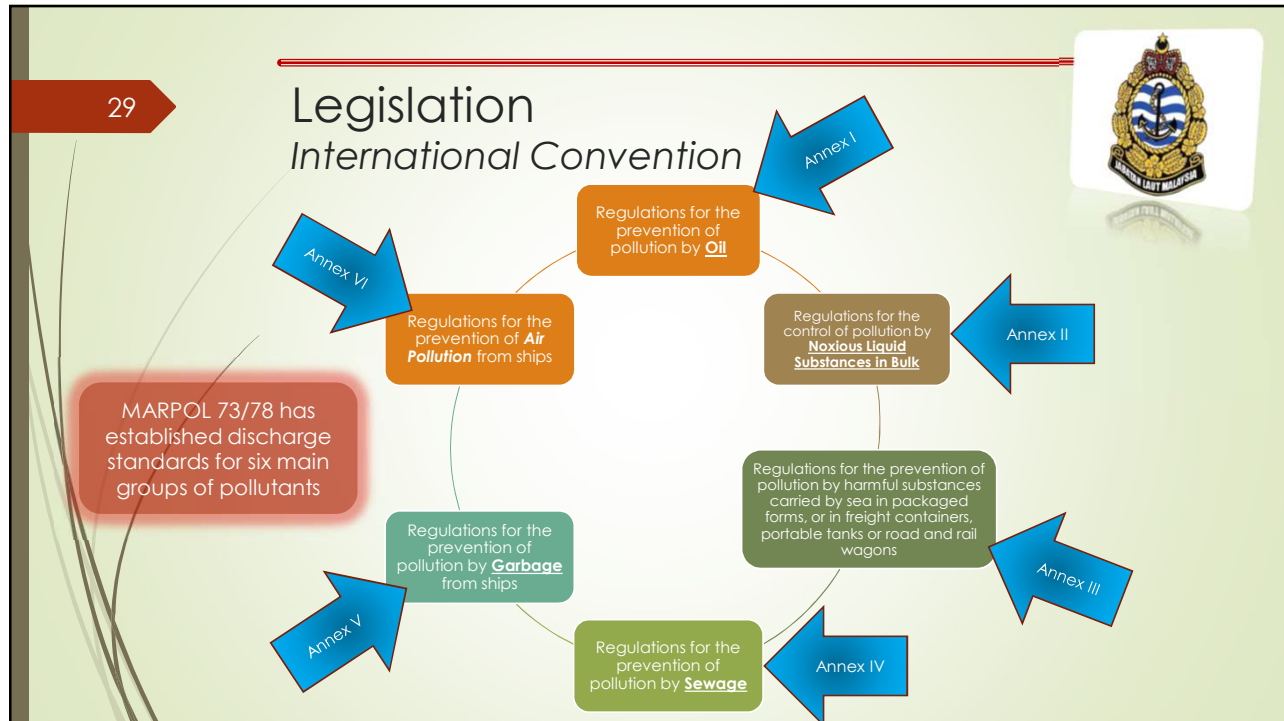
Diagram Depicting The Area Of Responsibility



INTERNATIONAL CONVENTIONS



No	International Convention	Enforcement Date
1	The Protocol on Preparedness, Response and Co-Operation To Pollution Incidents by Hazardous and Noxious Substances (OPRC HNS), 2000	21 st February 2014
2	International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL), Annex VI: Prevention of Air Pollution from Ships	27 th December 2010
3	International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL), Annex IV: Prevention of Pollution by Sewage from Ships	27 th December 2010
4	International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL), Annex III: Prevention of Pollution from harmful substances in Packaged Form	27 th December 2010
5	The International Convention on Civil Liability for Bunker Oil Pollution Damage, 2001 (Bunkers Convention 2001)	12 th December 2009
6	The International Convention for the Limitation of Liability for Maritime Claims, 1976 as Amended by Protocol of 1996 (LLMC Convention 1996)	10 th February 2009
7	International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (FUND) Protocol 1992	9 th June 2005
8	International Convention on Civil Liability for Oil Pollution Damage (CLC) 1992	9 th June 2005
9	International Convention on Oil Pollution Preparedness, Response and Co-operation (OPRC) 1990	13 th October 1997
10	Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships (MARPOL) 1973, as amended (Annexes I, II and V)	1 st May 1997



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Discussion

“We were brilliant. The only disappointment is that we were outstanding in our work but mistakes have cost us”

Brendan Rodgers'
The Sun, April 26, 2013

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Conclusion



- ▶ Living with the problem;
- ▶ New direction in State's practise?

- ▶ To promote effective response to ship source spills;
- ▶ Encourage and support industry and governments to work cooperatively, promoting the adoption of proven, credible, integrated and sustainable national, regional and international oil spill response capability