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Regional Network on the Legal Aspects of Marine Pollution

Inception Workshop

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REGIONAL NETWORK ON THE LEGAL ASPECTS OF MARINE POLLUTION: INCEPTION WORKSHOP

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1.0 BACKGROUND

1.1 INTRODUCTION

One of the components of the GEF/UNDP/IMO Regional Programme for the Prevention and Management of Marine Pollution in the East Asian Seas is entitled *STRENGTHENING REGIONAL CAPACITY IN IMPLEMENTING INTERNATIONAL CONVENTIONS*. The main objective of this component is to assist participating nations in developing the necessary legislative and technical capability to implement international conventions relating to marine pollution.

To implement this component, the Regional Programme, through the Network Coordinator, is mandated to organize a Regional Network of Legal Experts on Marine Pollution. This network will work and collaborate with other networks organized or being organized by the Regional Programme on other aspects of marine pollution. It is envisioned to act as a catalyst to accelerate efforts of countries in the East Asian region towards development, formulation and implementation of marine pollution legislation.

The Inception Workshop for the Network was held at the Manila Galleria Suites, Pasig City, Metro Manila, Philippines on 18-19 March 1996. It was attended by 17 participants from 10 countries in East Asia, namely: Cambodia, China, Indonesia, Japan, Malaysia, the Philippines, Republic of Korea, Singapore, Thailand, and Vietnam. A list of participants is attached as Annex 1.

1.2 OBJECTIVES

The objectives of the Workshop were: a) to produce a directory of Network members; b) to formulate the Network's operational plan; c) to obtain commitments from the members to participate in the Network activities, and d) to plan activities.

The following outputs were expected: a) a decision to have a Network, with a structure, objectives and operational plan; and b) a Workplan. Substantively, discussions were expected to result in the documentation of the state of marine pollution legislation and the constraints to ratification of marine pollution-related international conventions in each of the participating countries represented in the Workshop.

2.0 PROCEEDINGS

The Program and a list of the Workshop documents are found in Annexes 2 and 3, respectively.

2.1 OPENING CEREMONY

The opening ceremony began at 9:10 a.m. of 18 March 1996, with three speakers welcoming the participants.

2.1.1 Opening Remarks - Dr. Antonio G. M. La Viña

Dr. La Viña, Undersecretary for Legal Affairs of the Department of Environment and Natural Resources of the Philippines, said that there is, at present, no regional body focused primarily on the development, formulation and implementation of marine pollution legislation in the East Asian Region. The regional network, therefore, is the first to address marine pollution management issues from a legal standpoint. Dr. La Viña expressed the hope that the network will act as a catalyst to the efforts to establish a legislative framework at the regional level to deal with marine pollution problems.

The text of Dr. La Viña's address is found in Annex 4-A.

2.1.2 Welcome Remarks - Dr. Chua Thia-Eng

Dr. Chua, Programme Manager of the GEF/UNDP/IMO Regional Programme for the Prevention and Management of Marine Pollution in the East Asian Seas (MPP-EAS), pointed out that marine pollution has no geographical boundaries. Therefore, national, regional and global efforts are necessary to prevent, control and mitigate marine pollution. The Programme adopts a holistic, multisectoral and integrated approach to the problem of marine pollution. Dr. Chua posed the following challenges to the network members:

i. How can the network effectively contribute to the ratification and implementation of marine pollution-related international conventions?

ii. How can the network give advice and technical assistance to the national governments?

iii. How can the network become self-sustainable and continue operations beyond the lifetime of the Programme?

The text of Dr. Chua's address is found in Annex 4-B.

2.1.3 Opening Address - Mr. Farouk Y. Tarzi

Mr. Tarzi, Deputy Resident Representative of the UNDP, mentioned the different international instruments which focus on the marine environment, showing their ecological and environmental importance. He also mentioned the new approaches that these international instruments have introduced, such as the precautionary principle and the use of the best available techniques, and such principles as "polluter pays". He concluded by expressing his expectation that the regional legal network on marine pollution would address the concern of not just ratification of these international treaties but their effective implementation as well, a task which is not easy, because the approaches to be taken must consider not only international and national legislation but also the East Asian region's environmental, economic and political diversity. Mr. Tarzi expressed thanks to IMO for its partnership with UNDP in implementing this Programme.

The text of Mr. Tarzi's address is found in Annex 4-C.

2.2 INTRODUCTION TO THE WORKSHOP

2.2.1 Introduction to the Workshop - Ms. Stella Regina Bernad

Ms. Bernad, Assistant Network Coordinator, stated the following goals of the Inception Workshop:

i. to produce two documents, namely: a) a Network Founding Charter which will contain the group's resolution to form a network and the structure, objectives and operational plan of the network; and (b) Workplan for the Network;

ii. to produce documentation on: (a) the state of marine pollution legislation in the East Asian region; and (b) the constraints to ratification of international conventions on marine pollution.

2.2.2 Introduction to the Regional Programme for the Prevention and Management of Marine Pollution in the East Asian Seas - Mr. Adrian Ross

Mr. Adrian Ross, Senior Technical Officer of the IMO, introduced the Programme's Biannual Report as the most comprehensive document with respect to the design of the Programme, its accomplishments in its first two years and its plans for the next three years. The Programme's overall objective is to support the efforts of the participating governments in the region in developing and implementing the prevention and management of marine pollution on a long-term and self-reliant basis. It is this last qualification which makes the Programme unique with respect to its design and manner of implementation.

Mr. Ross stated that in a region of such diverse socioeconomic and political situations and technical and scientific skills and capabilities, achieving the Programme's broad overall objective would require the strengthening of capabilities in the region. To this end, the Programme has developed four strategies:

i. Development and demonstration of working models on marine pollution prevention and management and on risk assessment -- There are three demonstration sites in the region, in two of which the Programme works with local communities. The first challenge of the proposed legal network is to recognize that the network should focus not only on regional and national requirements such as law and policy, but also on how these laws and policies can be developed at the local level and on how local governments can use these policies in a practical and feasible manner.

ii. Promotion and ratification of international conventions, assisting in the development of the necessary technical capabilities in each of the countries to enable them to implement the international conventions as fully and capably as possible -- While international conventions involve obligations on the part of national and local governments, they also provide opportunities for public-private partnership, privatization, and development of the environmental industry in the region. These opportunities have to be recognized and built-up in the region in the development of policies at the national level.

iii. Development and strengthening of regional capacities in marine pollution prevention and management -- Scientists and institutions have been involved in the collection of information on marine pollution. What is lacking is the ability to translate and use this information in the management of marine areas. To fill this void, the Programme is trying to involve all disciplines in the development of pollution monitoring programs by interconnecting disciplines --- scientists and lawyers, scientists and decision-makers, local communities and national governments. This interdisciplinary strategy should be considered by the network when it provides decision-makers with necessary advice.

iv. Promotion of sustainable financing -- From the beginning, the Programme has focused on how to sustain activities and programs that are being created and strengthened as a result of the Programme's initial five-year period. To this end, public sector-private sector partnerships are promoted and interaction is encouraged among the users/beneficiaries of the marine environment and local community groups, industry, and national government.

2.3 PRESENTATION OF PAPER AND DISCUSSION: *OVERVIEW OF INTERNATIONAL INSTRUMENTS RELATING TO PROTECTION OF THE MARINE ENVIRONMENT IN EAST ASIA* - PROF. ROBERT BECKMAN

Prof. Beckman briefly discussed a few points made in his paper. His views are summarized as follows:

i. The most important international document in marine pollution prevention and management is the 1982 Convention on the Law of the Sea (UNCLOS) because it provides a framework for all international laws relating to the oceans, integrating all conventions pertaining to the marine environment. UNCLOS requires states-parties to comply with the requirements of the IMO Conventions.

ii. In particular, Part XII of the 1982 Convention refers to:

   a. The MARPOL Convention, dealing with marine pollution from ships; and

   b. The London Convention, dealing with marine pollution from ocean dumping of wastes and other matter.

iii. Ship-generated pollution, under the MARPOL Convention, results from normal vessel operations. It constitutes probably not more than 10 percent of marine pollution throughout the world; but this percentage may be higher in major shipping lanes. It was emphasized that the rules established by MARPOL are the minimum to be implemented by states.

iv. UNCLOS provides that states, directly or through the IMO, have the responsibility to provide technical assistance to developing countries. Technology and financing are necessary in marine pollution prevention and management and are the main concerns of states in this region.

v. Political will is necessary. Major port states in the region should agree to implement the major provisions in the conventions. With respect to implementation, the priorities should be MARPOL, ocean dumping, and port state control.

vi. With regard to land-based sources of marine pollution, monitoring is probably of the highest priority. Governments have to develop national legislation to deal with these sources of pollution. Solutions cannot be found in the coastal areas alone but must start inland.

The following points were made during the general discussion:

vii. When a state ratifies the 1982 Convention, it is obligated to comply with the international laws on marine pollution established by the relevant international instruments. With regard to ship-generated waste, a state-party to UNCLOS is obligated as a minimum to comply with the provisions of MARPOL. It was suggested that UNCLOS member states should also ratify MARPOL and obtain the benefits under the convention, like technical assistance.

viii. If an international convention's requirements are too unrealistic for a subregion given the state of development there, the states of that subregion could come up with a regional agreement which would meet particular needs and circumstances of these countries for its implementation.

ix. Distribution of information from the IMO is very slow as it is not available on the worldwide web network yet, unlike the Basel Convention. The Regional Programme provides a useful service by giving quick updates through its newsletters as to the status of ratifications of the marine pollution conventions. It would be even better if information on legislation of the different countries in the region implementing these international instruments could also be provided. The legal network should be able to continue providing this service.

x. Prof. Beckman's personal view regarding the development into customary law of portions of UNCLOS is that UNCLOS is reaching a level of acceptance where all states regard its provisions as the starting point. For example, a significant provision of UNCLOS states that every state must have regulations controlling ocean dumping. He would argue that all states, whether or not parties to the London Convention, are now obligated to comply.

Prof. Beckman's paper is found in Annex 5.

2.4 COUNTRY REPORTS

Following are the salient points of the discussions on country reports. The guidelines for country reports which were given to the participants for preparation are found in Annex 6.

2.4.1 Cambodia

i. Due to two decades of war, Cambodia has had little development in its coastal area and, therefore, the problem of marine pollution in Cambodia is not yet serious.

ii. One of the few serious environmental problems existing now concerns the discharge of untreated waste from shrimp farms into the sea, which has impacted on water quality and biodiversity in the marine zone. To prevent marine pollution caused by shrimp

farming, the Ministry of Environment recently adopted an order prohibiting the construction of new shrimp farms.

iii. Despite the lack of a legal regime for marine pollution liability, the Ministry of Environment has strongly recommended that all contracts for offshore oil exploration between the government and gas exploration companies include a provision that such companies will be responsible for and will bear the costs of cleanup of any spills resulting from their activities.

iv. There is a Sub-decree No. 11 (5 March 1983) on harbour rules for foreign ships, which prohibits the discharge of sewage or used oil and the dumping of any waste into the water or onto the dock. There is also a Ministry of Environment regulation (Prakas No. 992, 23 May 1994) which prohibits the discharge of liquid industrial waste and sewage into the sea, rivers or lakes.

v. Cambodia's Royal Government was only recently restored and, although Cambodia is party to a number of international conventions, no convention has been implemented as yet. A draft law on national environmental protection, called the Environmental Protection Law, has been submitted to the Council of Ministers and is now awaiting adoption by the National Assembly. Cambodia is also ready to adopt some additional legal instruments related to this proposed law on environmental protection. UNDP's Environmental Technical Advisory Project is assisting the Ministry of Environment in developing the appropriate policies and legal instruments for the implementation of the Environmental Protection Law after its enactment by the National Assembly.

vi. Prohibiting shrimp farms shuts off a good economic opportunity for Cambodia. Shrimp farms need not be prohibited and neither should the environment be harmed, as long as there is proper planning of resources. The problem might be that many of the laws are being formulated by foreign consultants who may not have a good grasp of the situation and laws are developed without knowing their effect or their applicability.

vii. On environmental education in Cambodia, there is one training on Environmental Impact Assessment and a number of short training courses on environmental protection. There is also a UNDP-assisted project on environmental education in eight provinces and in the city of Phnom Penh.

The text of the country report on Cambodia is found in Annex 7-A.

2.4.2 Japan

i. The role of the Environment Agency is to formulate the draft technical standards to implement laws. It consults with the other government agencies, which is a practice

in Japan to avoid conflicts in jurisdiction and laws that are inappropriate or unenforceable. Compromises are reached and amendments are made before the draft is brought to the state.

ii. Japan is sometimes slow in ratifying international conventions because Japanese officials are very prudent about possible conflicts. However, once Japan ratifies a treaty, it takes full responsibility for the enforcement of related domestic laws.

iii. Many attempts have been made in Japan for material environmental impact assessment (EIA) legislation. However, the Ministry of Industry and Trade, the Ministry of Transportation, the Ministry of Construction, and other ministries did not favour the passing of uniform EIA legislation because of a perceived negative effect on Japanese industry. The Environmental Agencies favour an EIA law. The tentative solution to this conflict was in the form of a cabinet resolution in 1972, which provided guidelines for EIA stating that if the government is involved in the construction, an EIA would be required. In 1984, the Cabinet adopted a guideline -- *Concerning the Enforcement of an EIA*, based on the resolution of 1972 -- which requires an EIA for certain types of construction.

At the level of local governments however, political power is closely linked to the power of the ruling party. Thus, more than 40 prefectures where the ruling party favoured the EIA have passed an ordinance or guideline requiring an EIA.

The written country report of Japan is found in Annex 7-B.

2.4.3 Indonesia

i. A strong legal basis for the protection of the marine environment in Indonesia may be found in Act No. 4 of 1982 or the Basic Provisions for the Management of the Living Environment (EMA 1982). This Act provides for an integrated effort in the utilization, supervision, control, restoration and development of the living environment.

ii. Indonesia ratified the UNCLOS of 1982 on 31 December 1985 by Act No. 17 of 1985. Since then, Indonesia has had solid legal ground for the protection of the marine environment.

iii. Dumping is prohibited by law; but law enforcement is a complicated problem in view of the archipelagic nature of Indonesia.

iv. Legislation on seabed activities is inadequate and may be found scattered in various laws on the marine environment. Law enforcement is very weak.

v. Liability for pollution of the living environment and the payment of compensation to victims whose right to a good and healthy living environment has been violated are provided for in the EMA. According to Art. 21 of the EMA, strict liability can be applied if stipulated in relevant legislation. Under Presidential Decree Number 18 of 1978 on the ratification of the CLC, strict liability is valid in cases of marine pollution.

vi. EIA is also stipulated in the EMA. EIA is further regulated by Government Regulation No. 51 of 1993 and by a number of Ministry of the Environment decisions.

vii. The use of market-based instruments is not yet implemented although there is a legal basis for implementation in the EMA. Although not concretely formulated in the provisions of the EMA, it can also be said that the "polluter pays" principle is applicable in Indonesian environmental legislation, including marine pollution control.

viii. There are two ways of ratifying a convention under Indonesian fundamental law --- by Act of Parliament or by Presidential Decree. Most conventions are ratified by presidential decree which is the easier and faster mode. Regulations are provided and conventions are implemented by Ministry Decision. Conventions involving security of Indonesian interests or concerning boundary issues with neighbouring countries must be ratified by Acts of Parliament. Conventions concerned with more practical matters are ratified by Presidential Decree.

ix. Upon ratification, the convention is annexed to the presidential decree or act. The convention is translated into the Indonesian language but the official text is the English text.

x. There are various levels in Indonesian regulations, the highest being the Acts which are general in scope, providing strategies and frameworks. The next level is operational. There are also regulations established by presidential, ministerial, or regional decrees. MARPOL is national and is under the control of the Department of Defense. Regulations for the enforcement of MARPOL are enacted by the central government. But the authority to implement MARPOL, as far as technical and capacity matters are concerned, has been devolved to the provinces.

Two written country reports for Indonesia were submitted. They are found in Annexes 7-C-1 and 7-C-2.

2.4.4 Republic of Korea

i. The Water Environment Preservation Act (August 1, 1990, Law No. 4260) is the major regulatory statute for controlling land-based sources of pollution. The Act prohibits, among others, the dumping of industrial and hazardous wastes into publicly-owned water. Because this Act regulates all emissions of pollutants into rivers, lakes and

coastal waters, there is doubt as to its efficiency in controlling pollution of coastal waters in particular. The basic approach under this Act is emission control based on quality standards set by Ministerial Decree. Current emission standards are strictly concentration-based and are more commonly denominated as parts per million (ppm).

ii The regulatory mechanisms under the Act designed to regulate emission activities include direct regulation (which provides a maximum penalty of seven years imprisonment and/or fines not exceeding 50 million won [$US 60.000]) and the emission charge (effluent charge against persons who emit certain pollutants beyond the set standards).

iii. Relevant legislations concerning land-based sources of marine pollution include the Sewage, Sludge, and Animal Wastewater Treatment Act (March 8, 1991, Law No. 4364) and the Waste Management Act (March 8, 1991, Law No. 4363).

iv. The Marine Pollution Prevention Act of 1977 applies to marine pollution arising from the activities of vessels and offshore facilities in the waters contiguous to the territory of Korea and from seabed drilling activities authorized under the Submarine Mineral Resource Development Act of 1970, as well as those arising from vessels registered in Korea and all the marine pollution in the special zones created for coastal water pollution prevention. Under this Act, the dumping of industrial wastes into the sea and the discharge of oil, oily mixture, noxious materials and wastes from offshore facilities are prohibited unless discharged in accordance with the regulations of the Ministerial Decree.

v. The Ministry of Environment has general authority to investigate the status of marine pollution and to set the water quality standards in each marine zone.

vi. The Environmental Impact Assessment Act (Dec. 31, 1993, Law No. 4493) requires the Ministry of Environment to review the Environmental Impact Statement submitted by coastal developers.

vii. The Basic Environmental Policy Act (August 1, 1990, Law No. 4257) provides the legal basis for the Ministry of Environment to set national environmental policy and establish a long-term environmental management plan.

viii. The fishery resource conservation zone is located between Korea's territorial sea and contiguous sea. This zone was created by proclamation in 1952. The special management areas are located beyond the territorial sea.

ix. Dumping in Korean waters has to follow the guidelines set by Ministerial Decree. Dumping areas have already been designated in the sea between Korea and Japan but these cannot be said to be within the EEZ as Korea has not proclaimed its EEZ. This

was compared to the situation in Indonesia, where dumping in the EEZ can only be done by permit of the Indonesian government. (In Korea, the Presidential Decree is the basic law, while Ministerial Decrees are the enactments.)

The written country report for the Republic of Korea is in Annex 7-D.

2.4.5 Malaysia

i. Land-based activities are the major source of marine environment pollution in Malaysia, contributing about 70 percent of pollution in its marine waters.

ii. Laws related to environmental issues during the colonial government emphasized protection of economic resources only. These laws were mainly sectoral in nature and were ineffective in addressing environmental pollution problems.

iii. Prior to the enactment of the Environmental Quality Act of 1974 (EQA), Malaysia's approach to marine pollution issues was fragmented, making it difficult to tackle environmental problems which require a holistic and integrated approach. But, despite the changing approach, the courts still cite British cases as precedents.

iii. Today, the management of environmental pollution in Malaysia is governed by the EQA, which is the principal law on land-based pollution. This law contains a few provisions pertaining to the marine environment. Both regulatory and market-based approaches are used.

iv. The market-based approach introduced in the early 1970's has been implemented directly and indirectly for the major polluting industries such as the agro-based industries and toxic and hazardous wastes generators.

v. The policy considerations behind Malaysia's ratification of the Civil Liabilities Convention in 1994 and 1995 and her non-ratification of the 1976 and 1992 protocols are not clear, but there has been a positive response from the concerned agency to ratify the 1992 Protocol, considered essential in view of Malaysia's ratification of the 1969 Convention.

vi. The roles of Federal and State authorities are governed by the Federal Constitution. Certain activities such as fisheries fall under the federal list of the Ninth Schedule of the Federal Constitution and are thus governed by the Fisheries Act 1985. On the other hand, sewage and sedimentation issues fall under the State list which is governed by State Enactments. Marine Pollution issues thus require the enforcement and coordination of both Federal and State authorities.

The written country report for Malaysia is in Annex 7-E.

2.4.6 *Singapore*

i. There is at present no specific national legislation directly governing the issue of marine pollution from land-based sources. The only Act which contains specific provisions relating to pollution of the marine environment from land-based sources is the Prevention of Pollution of the Sea Act (PPSA). Although the PPSA was enacted primarily to give effect to MARPOL, Sec. 5 of Part II of the Act makes it a criminal offence to deliberately pollute Singapore waters. The term "Singapore waters" includes the Singapore territorial seas and inland waters.

ii. The Water Pollution Control and Drainage Act regulates pollution of inland water sources. The Petroleum Act seeks to prevent pollution from petroleum-refining activities. The Environmental Public Health Act regulates dumping of industrial wastes and dangerous substances on land. These Acts may be relevant in marine pollution prevention and management if these wastes find their way into the marine environment and if their source can be traced back to improper disposal on land or in inland waters.

iii. Discharges by vessels into Singapore waters are prohibited by PPSA, in effect implementing Annexes IV and V of MARPOL. There is no law governing pollution from seabed activities.

iv. In Singapore, EIAs are not compulsory for major projects. However, if the Ministry of Environment deems a particular project to have sufficient potential for pollution that may affect public health, an EIA may be required.

v. Market-based strategies, such as the imposition of a tariff for a permit to discharge effluent directly into the sewerage system, are used.

vi. The small size of Singapore and the unicamerality of its legislature makes the passing of marine pollution laws easier. The attitude of the government appears to be that no international convention should be ratified merely for the sake of ratification. Once Singapore ratifies an international convention, it takes its obligations seriously, enacting corresponding implementing legislation and effectively enforcing these laws through the administrative and court systems.

vii. Before the EIA requirement was formally introduced in Singapore, there were already a number of Acts, e.g., the Petroleum Act and the Environmental Public Health Act, which imposed a very stringent system and regulatory structure on all foreign and local corporations setting up business in Singapore. EIAs are done on an *ad hoc* basis --- an administrative decision rather than a function of the legislature. When an industry is perceived to be potentially hazardous, an EIA will be required.

Pollutive industries in Singapore have always been regulated, not by a specific EIA Act but by a host of other Acts put together. Lately, however, there have been calls for an umbrella legislation consolidating all the discrete environmental acts which would include an EIA formal requirement.

viii. There are few organized NGOs in Singapore. There are groups of industries that perceive environmental protection as foremost among their concerns in operating in Singapore. Examples are multinational companies which voluntarily assume environmental responsibility, university student organizations and loose confederations of environmentally concerned citizens that periodically call for public participation.

ix. Compensatory mechanisms come under the Merchant Shipping Oil Pollution Act which implements the 1969 Civil Liability Convention. Under this Act, shipowners are entitled to limits on the amount of damages. Up to that maximum, there would be strict liability.

A civil case in any Singapore court would take a maximum of 1 1/2 years from inception of the writ served to its conclusion. A criminal case, if appealed to the Court of Appeals, would take about the same amount of time. The exception would be if there are scientific problems in ascertaining the damages as, for example, in the case of a huge oil spill.

The US$ 50,000 fine imposed under the aforesaid Act would probably be a good deterrent. So far, the maximum fine imposed has been only about $10,000. Since the Act is fairly new, its efficacy as a deterrent still remains to be seen.

The written country report for Singapore is in Annex 7-F.

2.4.7 Philippines

i. The Philippine Coast Guard (PCG) has always been the implementing body with respect to marine pollution legislation, but with the creation of the IMO desk at the Maritime Industry Authority (MARINA), the latter agency is also looking into the implementation of marine pollution legislation and conventions. Because of the fragmented implementation of legislation, the agencies concerned are fighting over who should properly implement the laws.

ii. IMO will provide assistance if the government requests for it. The Philippines is perhaps the most environmentally aware country in East Asia, but this is more about pollution on land rather than marine pollution.

iii. The problem faced by the Philippines is more the fragmented implementation (rather than a lack of environmental awareness) due to the existence of three agencies --- the

PCG, the MARINA and the Philippine Ports Authority (PPA). There is now a strong lobby for the creation of a Department of Maritime Affairs which will solve the problem of lack of coordination among the different administrative agencies implementing marine pollution legislation.

iv. There is a presidential decree creating the PCG and granting to it general powers. Under that mandate, the PCG has issued Memorandum Circulars. Pursuant to PD No. 600, the PCG is concerned with marine pollution prevention. MARINA's concern is the registration of vessels and looking into the capability of these vessels and of visiting vessels to comply with marine pollution prevention laws and the concomitant liabilities.

v. While the Philippines has not actually ratified the MARPOL convention, the PCG issuances in the early 1980's were actually adopted from the provisions of MARPOL, in effect, implementing that convention. The problem is whether the Philippine government has the moral authority to implement the provisions of MARPOL vis-a-vis foreign ships calling at her ports. The MARINA is prioritizing, among its concerns, the ratification of the IMO conventions.

vi. Before the enactment of the National Integrated Protected Area System (NIPAS) law, there were already existing protected areas which later became the initial components of the system. Additional components will soon be declared, among them an area in Palawan.

The written country report for the Philippines is in Annex 7-G.

2.4.8 Thailand

i. The major source of marine pollution in Thailand is land-based with 75 percent coming from domestic wastes and 25 percent from industry. Ocean dumping and vessel sources are also significant sources of pollution. Pollution from seabed activities is not significant because Thailand only has offshore gas production activities which are located outside the Thai territorial seas.

ii. Thailand has more than 20 laws dealing with pollution problems, each with its own objective and scope. These laws are implemented by various agencies. Cooperation among these agencies needs to be improved to effectively implement existing laws.

iii. The National Environmental Quality Protection and Promotion Act B.E. 2535 (1992) is the umbrella legislation containing the policies and standard criteria on environment protection. This Act is implemented by three agencies: the Office of Environmental Policy and Planning, the Pollution Control Department, and the Environmental Quality

Promotion. This Act provides for an EIA requirement in certain projects. In addition, the polluter pays principle is mentioned in the Act.

iv. The Harbour Department implements the law called Navigation in Thai Waters Act, B.E. 2456 (1913), one part of which deals with marine pollution, imposes a fine or imprisonment for violation of the Act, and demands indemnity and reimbursement for cleanup operations expenses.

v. Regarding authority in the offshore area, the Harbour Department has jurisdiction over the area within 12 miles from the shoreline only. The Thai Navy has some laws dealing with the open sea.

vi. There are no exact regulations to control offshore mining activities. In the case of mining operations on land, the operator is required to re-cover the mining area before operations are terminated but it is not clear if the same applies to offshore mining.

The written country report for Thailand is in Annex 7-H.

2.4.9 Vietnam

i. Industrial and urban pollution adversely affect the marine environment to the extent that 60-70 percent of wastes dumped into Vietnam's seas come from these sources. Offshore oil exploration and transportation also seriously threaten the marine environment. The production of oil is Vietnam's main source of national income. Vessel-source pollution and pollution generated by ports are other threats to the marine environment.

ii. Other highly pollutive marine uses and activities which require appropriate management to reduce their outputs of pollution are the following: human settlement (both commercial and residential development), mining and industrial development, sea and airport development, communications (some of the facilities of which are on the seabed), coastal parks and nature reserves.

iii. Environmental legislation in Vietnam gradually developed as society increasingly became aware of the problems affecting the environment. In the last decade, laws and regulations were enacted to conserve marine resources and the living environment. However, it was only in 1994 that a law was enacted specifically for the purpose of dealing directly with environmental issues. The 1994 Environmental Protection Law (EP Law) contains the basic provisions governing state management of the living environment. It is a broad statement of principles and contains specific provisions on marine pollution.

iv. Before Vietnam ratifies an international convention, the appropriate legislation is prepared many years ahead. The Constitution provides that, in general, international conventions must be adopted for ratification by the National Assembly if there is any conflict with a national law. To avoid such conflict, laws are promulgated even before ratification of the convention so that the national law will conform to the provisions of the convention.

The written country report for Vietnam is in Annex 7-I.

2.4.10 China

i. The Standing Committee of the National People's Congress (NPC) is now working on the amendments to the basic law -- the Marine Environmental Protection Law. This law, as with the other laws, will later be translated into English.

ii. The overlap or conflict between administrative agencies -- for example, the regulations on use of marine waters issued by the State Oceanic Administration (SOA) which are opposed by the Fisheries Department and National Environmental Protection Agency -- is a big problem in the management of the marine environment in China. It is the main problem in the amendment of the basic law (the Marine Environment Protection Law). The sea area is divided into the traffic area, the fishing area, the coastal area and the offshore area. There is conflict as to which department is in charge of pollution matters.

iii. Approaches to the problem in China could be either: (1) that jurisdiction of the agencies be determined by the source of pollution so that land-based pollution will be the concern of the Environmental Protection Administration while sea-based pollution will be the SOA's concern; or (2) that jurisdiction be determined by area, i.e., fishing area, traffic area, etc.

iv. Environmental shipping affairs are administered by the Bureau of Harbour Superintendency of the Ministry of Communications while dumping is the concern of the SOA.

v. In China, laws are promulgated by the Standing Committee while regulations are issued by the administrative bodies. These regulations apply to all of China. There is no special law on EIA; any EIA requirement in China comes from regulations on activities such as coastal construction and oil exploration.

The written country report for China is in Annex 7-J.

A summary of the national legislation relating to marine pollution in each of the participating countries based on the country reports is in Annex 8. A summary of the ratification of international conventions is found in Annexes 9-A and 9-B.

2.5 PRESENTATION AND DISCUSSION -- *CURRENT MARITIME LEGAL ISSUES IN NORTHEAST ASIA* - PROF. CHOON-HO PARK

Prof. Park made a slide presentation depicting the areas of conflict and cooperation among the Northeast Asian countries, including those concerning marine pollution. The discussion centred on Joint Development Agreements (JDAs) and Joint Development Zones (JDZs), of which there are many examples in Northeast Asia. The following is a summary of the discussion.

i. The Agreement of 1974 on a JDZ obligates Korea and Japan to protect the marine environment in the zone. Both countries have their own domestic laws specifying the conditions under which the marine environment will be protected. If any pollution accident occurs in the zone, both parties will jointly investigate the incident to determine which side (either or both) is liable.

   So far, no pollution problem specifically from seabed oil has cropped up. Fishermen who are inconvenienced in their operations by mineral resources activities in the zone are supposed to be compensated in case of loss or damage suffered due to pollution. But there has been no material case thus far.

ii. There are many JDAs in the North Sea and in the Persian Gulf, and in the latter there are several instances of pollution. There is no real difference between marine pollution accidents arising in the JDZ and those arising in other areas, but there are arrangements in the JDZ for joint investigation of any pollution accidents or incidents.

iii. There are tentative criteria for JDAs in general but these have been broadly laid down because the geographical circumstances in each area are so different that it is difficult to apply specific criteria commonly to all areas. Hence, the mode of dispute settlement is written into each Joint Development Agreement.

iv. There probably would be no problems as to which country's laws would apply in areas where sovereignty is unquestioned. Special problems for international lawyers would arise only in those joint development programs where states cannot agree on who has sovereignty over the area and a JDZ is created in the area of overlap. In such overlapping areas, no country's pollution laws or liability laws would automatically apply. In those areas, the applicable laws would probably be the laws of the country that licensed the company which was liable for the damage.

v. Detection and tracing of discharged oil has become scientifically and technologically more efficient. For example, if oil is discharged in the Atlantic Ocean, a sample of the spillage can be picked up and analyzed. Crude oil has 34 to 35 different grades. A check can be made with Lloyd's of London or with the Persian Gulf to see what grade of oil was loaded on which tanker and where such tanker was bound. This procedure is called "fingerprinting" the spillage.

vi. In the area between Vietnam and Malaysia, Vietnam applies Malaysian law, because there is no appropriate Vietnam law.

vii. It is sometimes useful to know which country's liability laws are less severe.

2.6 SUMMARY OF ADDITIONAL DISCUSSION POINTS

The following points, which were not made in particular reference to any country, were made during the discussions.

i. There was interest in the issue of shrimp farms, because of their existence in many of the participating countries.

ii. The situation of laws not meeting their objectives is common in many of the countries. And as long as the state is unable to enforce these laws, they will continue to be violated. The network should take up as a challenge the task of how to assist developing counties in formulating legislation that encourage development and protect the environment at the same time.

iii. The network's diversity is its strength. One of the network's objectives is to assist countries that have limited environmental legislation because of their historical experience. At the same time, countries that are already advanced in terms of legislation can learn from interacting with countries that still have some freedom in formulating and implementing legislation. Hopefully, all will benefit from the interaction.

The countries in East Asia may be classified into three with respect to environmental legislation: (1) the more advanced countries like Japan; (2) the ASEAN countries, with the exception of Vietnam, which have very similar environmental problems and legislation; and (3) countries like Cambodia and Vietnam which are only now formulating their legislation.

iv. There was a discussion on the advantage (expedience) and risk (abuse of power) of the legislative power and the power to ratify international treaties residing in the head of government.

v. It was suggested that the issues and problems of each country in the ratification and implementation of international conventions, as well as the institutional conflicts, be flushed out during the discussion. Are the national legislations ratifying international conventions consistent with each other? How do the institutional mechanisms operate --- Do they clarify inconsistencies or do they create more confusion?

vi. East Asian countries, large and small, are strongly influenced by the West with respect to their legal regimes. For example, there is a strong British influence in Malaysia, Singapore and Hong Kong; an American influence in the Philippines; and a Dutch influence in Indonesia. Japan was strongly influenced by Prussia in the process of adopting the Constitution of 1889. Japanese substantive criminal and civil law are based on the experience of Germany and France. After World War II, Japan was further influenced by the American type of legal system.

vii. Because of its unfortunate experiences with environmental problems, as in the Minamata case, Japan has had to find new approaches in the interpretation of civil law-- mainly tor law -- becoming in the process most advanced in the field of environmental law. The Japanese experience could be a source of precedents in environmental law problems and cases.

vii. On the hypothetical question: Suppose that a ship spills oil in Indonesian waters which does not affect Indonesia but drifts over and affects Singapore and Malaysia. What legal procedures are in place to deal with this situation? If Singapore's waters are affected then Singapore's own pollution act would take effect and it would try to acquire jurisdiction over the offending vessel. The problem of obtaining jurisdiction would have to be resolved by good neighbourliness and cooperation among the three countries involved.

There is a tripartite treaty among the three Malacca Strait countries but it probably does not cover the matter of compensation. A claim could be advanced under the Civil Liability Convention (CLC) if the flag state is a party to the 1969 CLC. Under the UNCLOS, a coastal state which suffers damage can ask the port state to institute action against that erring vessel. The problem in this situation is that the flag state can always intervene to take away jurisdiction. If the flag state is reluctant to prosecute, the coastal state may remain uncompensated. At the end of the day, it would be up to the state of registration of the vessel. The resolution to the problem would be a matter of diplomacy and negotiation. Or the coastal state may bide its time, wait for the erring vessel to dock at its port, then seize it when it enters the coastal state's waters.

viii. The problem of conflicts in legislation is a big one not only in China but in many other countries as well. Sometimes the problem is a conflict in legislation and sometimes a jurisdictional issue. The Network could be a means by which conflicts such as these

may be avoided in the future, by highlighting the need to be careful about apportionment of jurisdiction in the formulation of legislation.

2.7 DISCUSSION ON CONSTRAINTS TO RATIFICATION OF INTERNATIONAL CONVENTIONS

Dr. La Viña led a discussion on the constraints to ratification of international conventions to synthesize the country reports on that topic. Following is a summary.

i. The following constraints to ratification of conventions and implementation of legislations were mentioned:

   a. A conflict among and overlapping jurisdiction of the national implementing agencies;

   b. The issue of political systems; federal government powers versus state powers;

   c. Technical problems such as the lack of human resources, difficulty in translating the conventions to the local languages; and

   d. Political constraints.

ii. The conventions should be viewed not just in terms of legal and technical problems but in terms of the potential economic benefits and detriments of entering into a convention. A country, in deciding whether or not to ratify MARPOL, for example, would have to consider the economic impact of the convention on its fleet, on how older vessels might be affected, and on how this could have a detrimental effect on its outlying areas. There might be a need for geographers and economists to examine the whole question of shipping and the implications of full implementation of MARPOL at the regional level.

iii. The process of examining these implications is a technical process in which the network may collaborate and to which it can contribute. But the decision that has to be made at the end of that process is a political decision that is clearly a sovereign issue within each country.

iv. Not only the economic implications should be highlighted but the economic opportunities as well. For example, the establishment of reception facilities should not be seen as a financial obligation of the government but as a potential economic and business opportunity. In fact, one of the Regional Programme's activities is to look into how ratification of MARPOL can create business opportunities that will sustain the Programme's activities. This will hopefully be taken up in the next nine months

by the Programme's Sustainable Financing Conference where public-private partnership will be promoted.

v. There are efforts to look into the shipping aspect to determine in what way compliance with MARPOL requirements and improvement of navigational standards have resulted in an improvement of the economy. Vessels can carry more and earn more because of improved navigational charts. The shipping industry should be willing to take part. Perhaps banking institutions can provide loans.

vi. In looking at the subject of ratification of conventions, a broader approach should be taken, bringing together the legal, economic, financial and other points of view.

2.8 ORGANIZATIONAL MATTERS

A meeting, chaired by Dr. Antonio La Viña was conducted to take up the matter of the Network organization.

i. Dr. Antonio La Viña, whom the meeting acclaimed as Network Coordinator, gave a brief overview of the concept and objectives of the Network.

ii. The meeting decided to name the network the *Regional Network on the Legal Aspects of Marine Pollution*.

iii. The meeting prepared a draft founding charter, entitled the Network's *Mission Statement*. The Mission Statement is included in Part 3.0 of this Document.

iv. Dr. La Viña enumerated and briefly described the projects that the Regional Programme hopes to implement in 1996 in connection with the organization of the Network. The meeting agreed not to initiate any activities outside of the identified projects. The meeting expressed appreciation for the activities being undertaken by the Regional Programme.

2.9 PROTOCOL ON THE LEGAL INFORMATION DATABASE

i. The Assistant Network Coordinator, Ms. S. R. Bernad, outlined the project concerning the development of the Legal Information Database, inquired into the needs of the participants with respect to information and data and requested them to communicate these needs to the Network Coordinator. The participants were also requested to provide and share information and data with the Network.

ii. The meeting agreed to the following actions:

a. To communicate each country's legal information needs to the Legal Information Database;

b. To provide copies of the respective national legislation and regulations to the Legal Information Database; and

c. To cooperate in the exploration of means to share information with the Legal Information Database, as a number of participants are individually involved in other database projects.

iii. It was agreed that the Network Coordinator will provide a copy of the index of the Legal Information Database to the participants and supplement this twice a year.

2.10 CLOSING

i. The rapporteur, Mr. Wilfredo Saraos, made his summary of the two-day Workshop. The text of his summary is in Annex 10.

ii. The Network Coordinator, Dr. La Viña, thanked all the participants and the Secretariat for their contribution to the Workshop.

iii. The Workshop was adjourned at 5:30 p.m. on Tuesday, 19 March 1996.

3.0 MISSION STATEMENT OF THE REGIONAL NETWORK ON THE LEGAL ASPECTS OF MARINE POLLUTION

MISSION STATEMENT

of the

REGIONAL NETWORK ON THE LEGAL ASPECTS OF MARINE POLLUTION

The participants in the Inception Workshop of the Regional Network on the Legal Aspects of Marine Pollution,

Noting that more than half of the population of the East Asian Sea region is concentrated along coastal areas and that economic activities to meet increasing subsistence and development needs have resulted in enormous pressures on the region's coastal and marine environments,

Noting further that the threat of marine pollution to the vitality and biodiversity of the coastal zones of East Asia cannot be underestimated,

Recalling the Rio Declaration on Environment and Development, in particular Principle 3 which proclaims that "the right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations",

Recalling further Agenda 21, in particular Chapter 17, which calls for the adoption of "new approaches to marine and coastal management and development at the national, sub-regional, regional and global levels, approaches that are integrated in content and are precautionary and anticipatory in ambit",

Recalling also Article 192 of the United Nations Convention on the Law of the Sea which imposes on states the obligation to protect and preserve the marine environment,

Acknowledging that only a few countries in the region have ratified and are implementing the relevant IMO conventions and other marine pollution agreements,

Acknowledging also that there is a need for a regional body or entity focused primarily on the development, formulation and implementation of marine pollution legislation,

Recognizing the important role of the GEF/UNDP/IMO Regional Programme for the Prevention and Management of Marine Pollution in the East Asian Seas,

Stressing that there is, in East Asia, diversity -- in capacity, in the state of the marine environment and pollution, and in the legal and political characteristics of the countries in the region,

Determined, in the spirit of collaboration and partnership, to conserve and sustainably use marine and coastal resources and to prevent marine pollution for the benefit of present and future generations,

Have agreed to organize this Regional Network on the Legal Aspects of Marine Pollution, as follows;

1. **Objectives of the Network**

(a) To assist participating nations of the Regional Programme for the Prevention and Management of Marine Pollution in the East Asian Seas (MPP-EAS), particularly less developed countries, in developing the necessary legislative and technical capability to ratify and implement international conventions relating to marine pollution;

(b) To assist the countries in the region in developing regional policies and agreements with respect to the prevention and mitigation of marine pollution where such regional initiatives are desired by the countries and where appropriate and necessary;

(c) To promote, complement and assist national and regional efforts to develop, enact and effectively implement international and national laws on marine pollution;

(d) To identify problems and obstacles to ratification or implementation of international conventions and national legislation on marine pollution;

(e) To develop, design, and implement specific projects related to marine pollution legislation and implementation of international, regional and national conventions and laws, including the use of economic instruments as a mode of regulating behaviour and changing human attitudes;

(f) To enhance the knowledge and capabilities of its members as regards existing international conventions on marine pollution, thereby enabling them to contribute to the development and formulation of marine pollution legislation and to the implementation of such laws; and

(g) To cooperate with regional and international organizations, initiatives and mechanisms, including the other regional networks established under the MPP-EAS, in programs and projects relating to marine pollution in the region.

2. **Membership in the Network**

The Regional Network shall be composed of individual national associates from countries in East Asia who are persons specializing in law and policy, attached to or affiliated with public or private institutions engaged in marine, coastal, and environmental issues, particularly those involved in marine pollution and coastal management, including

governmental environmental agencies, public and/or private policy institutions and academic research institutions.

3. Organizational Framework

The Regional Network is an association of individual national associates, voluntarily collaborating with each other and working together to attain the objectives of the network.

The members of the network shall meet at least once a year to review and plan its activities. It shall be convened by the Network Coordinator, who shall initially be based in the Programme Development and Management Office of the MPP-EAS in Manila, Philippines. Implementation of network activities shall be distributed among its members.

Seed funding for establishing the Regional Network and for its initial activities shall come from the MPP-EAS. Other sources of funding shall, however, be explored and obtained.

4. Operational Guidelines for Network Activities

Implementation of network activities shall be guided, among others, by the following principles:

(a) Respect for the economic, political, and cultural diversity of the countries in the East Asia Region shall, at all times, be paramount in designing and implementing activities.

(b) The network shall adopt an interdisciplinary approach and shall interact and collaborate with other regional and international networks established under the MPP-EAS.

(c) Lessons from the demonstration site projects of the MPP-EAS, insofar as these are relevant, shall always be integrated into the outputs of the network.

5. Review of the Mission Statement

The members of the network may review this Mission Statement at its annual meeting.

Manila, Philippines, 19 March 1996.

ANNEXES

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PROGRAM

Day One 18 March (Monday)

0830	Registration
0900	Opening Ceremony Opening Remarks Dr. Antonio G.M. La Viña Undersecretary for Legal Affairs Department of Environment and Natural Resources Welcome Remarks Dr. Chua Thia-Eng Programme Manager Opening Address Mr. Farouk Tarzi Deputy Resident Representative UNDP Manila
0930	Introduction to the Workshop Stella Regina Bernad Assistant Network Coordinator
0945	The GEF/UNDP/IMO Regional Programme for the Prevention and Management of Marine Pollution in the East Asian Seas Mr. Adrian Ross Senior Technical Officer, IMO
1000	*Coffee Break*
1030	Overview of International Instruments Relating to Protection of the Marine Environment of East Asia Mr. Robert Beckman Associate Professor, Faculty of Law National University of Singapore
1115	Presentation of Country Reports on Marine Pollution Legislation, Including Ratification of International Conventions All Participants
1200	*Lunch Break*
1400	Continuation of Presentation of Country Reports on Marine Pollution Legislation, Including Ratification of International Conventions All Participants

1600	*Coffee Break*
1630	Continuation of Presentation of Country Reports on Marine Pollution Legislation, Including Ratification of International Conventions All Participants
1830	Conclusion of Day 1

Day Two 19 March (Tuesday)

0830	Current Maritime Legal Issues in Northeast Asia Professor Choon-Ho Park
0900	Role of the Legal Network/Objectives/ Legal Network's Operational Plan Dr. Antonio La Viña Network Coordinator
1000	*Coffee Break*
1030	Continuation on the Legal Network Dr. Antonio La Vina
1200	*Lunch Break*
1400	Strategy/Plan of Action
1500	Presentation on the Legal Information Database Stella Regina Bernad
1530	*Coffee Break*
1600	Conclusions and Recommendations Declaration Adoption of Operational Plan Protocol on Database Other Decisions
1700	Closing Ceremony
1800	*Reception*
2200	Conclusion of Day 2

LIST OF WORKSHOP DOCUMENTS

Programme
List of Participants

Pink Folder:

1. Dr. Chua Thia-Eng, *Marine Pollution: Development Since UNCLOS III and Prospects for Regional Cooperation*

2. Information on International Conventions

   2.1 Status of IMO Conventions -- by Date
   2.2 Status of IMO Conventions -- by Country
   2.3 *Focus on IMO:* Summary of Conventions

Blue Folder: Robert Beckman, *Overview of International Instruments Relating to Protection of the Marine Environment of East Asia*

Green Folder: Country Reports:

Guidelines

Cambodia
China
Indonesia (2 Papers)
Japan (Background Papers on Water Quality Preservation and Ocean Resources and Coastal Zone Laws and Litigation in Japan)
Malaysia
Philippines
Republic of Korea
Singapore
Thailand
Vietnam

Yellow Folder:

1. Dr. Antonio La Vina, *Establishing a Regional Network of Legal Experts on Marine Pollution* -- Working Paper

2. Caribbean MARPOL Project

3. List of Network Members

4. Current Network Brochure (for revision)

ANNEX 4-A

OPENING REMARKS

Dr. Antonio G. M. La Viña
Undersecretary
Department of Environment and Natural Resources, Philippines

Mr. Tarzi, Dr. Chua, colleagues from the Regional Programme, participants in this Workshop, friends:

I bid you welcome to this Inception Workshop of the Regional Network of Legal Experts on Marine Pollution. As Ms. Bernad has pointed out, I come before you on behalf of my country and my people.

The prevention of marine pollution is an important priority for the Philippines. We are an archipelagic nation of more than 7,000 islands. A great percentage of our population live in coastal areas and rely on coastal and marine resources for their subsistence and development needs. These coastal areas are characterised by diversified economic activities which have resulted in enormous pressures on the region's coastal and marine environments. Marine pollution is only one of the consequences of these pressures and dealing with it is one of the major challenges of our government and our people.

We are therefore happy and proud to host this Inception Workshop.

As Coordinator of this regional network, I am also pleased to welcome you to the workshop.

The threat of marine pollution to the vitality and biodiversity of the coastal zones of East Asia cannot be underestimated. Among others, the coastal waters of the region are contaminated by untreated sewage, garbage, sediments, oil, pesticides and hazardous wastes from land-based and sea-based activities. And while the open seas and oceans are, by comparison, cleaner, increasing maritime activities such as offshore exploration and production activities, make these waters vulnerable to pollution, especially oil and chemical spills and discharges. At present, many of the estuaries, lagoons and bays in the region have been proclaimed to be biologically dead or severely depleted of aquatic life. Indeed, ensuring, in the future, a cleaner and safer coastal and marine environment is one of the most difficult of the challenges facing states and policy-makers in the region.

To assist in meeting this challenge, the GEF/UNDP/IMO Regional Programme for the Prevention and Management of Marine Pollution in the East Asian Seas, of which the Regional Network of Legal Experts on Marine Pollution is a component, is designed to demonstrate how marine pollution can be controlled and managed in developing countries under the multi-disciplinary and participatory framework through the application of appropriate policy, institutional and technological interventions. Its overall objective is to support the efforts of the participating governments in the prevention and management of marine pollution at both the national and sub-regional levels on a long-term and short-term basis.

The Regional Network of Legal Experts on Marine Pollution proceeds from the premise that pollution risk in coastal and international waters can be minimised if countries develop the necessary national legislation and technical capabilities to ratify and implement international conventions, protocols and codes of practices such as those developed through the IMO and the UNEP as well as resulting from the United Nations Convention on the Law of the Sea. The fact is that, at present, only

a few countries in the region have ratified and are implementing the relevant IMO conventions and other marine pollution agreements. While many countries already have legislation in place, many of these laws are either not implemented or need to be revised or replaced for greater effectivity.

There is at present no regional body or entity focused primarily on the development, formulation and implementation of marine pollution legislation at the East Asian level. This is the first network of the legal experts on marine pollution in the region. It will also be the first entity to address marine pollution management issues from a legal standpoint. Indeed, while most governments in the region are trying to establish a coherent legislative framework to deal with marine pollution, a catalyst is needed at the regional level to accelerate these efforts. The Regional Network will hopefully fulfil this role.

The network also proceeds from the recognition that there is in the East Asian region diversity -- in capacity, in the state of the marine environment and pollution, and in the legal and political characteristics of the participating countries. Thus a network strategy will hopefully result in a cross-fertilisation of legal concepts and experiences. The network approach can also lead to the examination of possible regional policy and legal initiatives which the participating countries may want to adopt to minimize pollution. This includes initiatives to harmonize standards on emissions, the drafting of guidelines on marine pollution legislation, etc.

The main objective of the Regional Network is to assist participating nations in developing the necessary legislative and technical capability to implement international conventions relating to marine pollution. In such an undertaking, the fundamental guide in the formulation or updating of national legislation is the practicality and ease of implementation, taking into account the legal, socio-economic and political settings of the countries concerned.

A corollary objective is to assist the countries in the region develop regional policies and agreements with respect to the prevention and mitigation of marine pollution where such regional initiatives are desired by participating countries and where appropriate and necessary.

I am hopeful, as we convene our first meeting, that we will be able to meet these challenges.

Thank you and good morning.

ANNEX 4-B

WELCOMING REMARKS
by Dr. Chua Thia-Eng
Programme Manager
GEF/UNDP/IMO Regional Programme for the Management of Marine Pollution in the East Asian Seas

Hon. Undersecretary, Dr. Tony La Viña, Mr. Tarzi, Officer-In-Charge, United Nations Development Programme, Ladies And Gentlemen:

I am very pleased to note that participants from China, Cambodia, Indonesia, Japan, Malaysia, Philippines, Korea, Thailand, Singapore and Vietnam are attending this Inception Workshop of Legal Experts. To all the foreign participants, I join Undersecretary La Viña in welcoming you to Manila, Philippines.

As all of you are aware, a major threat to human prosperity is **pollution** -- pollution which is the creation of our very own activities. Our health is increasingly threatened by the polluted air we breathe in, by the contaminated water we often drink, and also by the food we usually take. Thus, there is an urgent need for all of us to be concerned about pollution and, more importantly, for us to do something about it.

More and more, the coastal waters and the seas around us are being threatened by pollution, arising from land- and sea-based sources as a result of increasing economic activities and human pressure. The coastal resource systems which generate goods and services for the welfare of our society are being seriously impaired by the increasing amount of pollutants in the marine environment and the destruction made on the valuable marine habitats. Furthermore, the water quality of the coastal water is increasingly being degraded; and this affects fish production, pollutes sea foods, and hinders sea recreation and coastal tourism development.

Whilst the seas and oceans are relatively clean as compared with the coastal waters, they are also being affected by pollution on land, increasing shipping traffic, seabed activities, living resource exploitation, and maritime trades.

Marine pollution has no geographical boundary. Therefore, national, regional and global efforts are necessary to prevent, control, and mitigate marine pollution; and this requires the efforts and collaboration of all concerned nations and individuals.

Marine pollution prevention and management require the use of combined policy and scientific, regulatory, and socioeconomic instruments to predict and forecast the movement of pollutants and their impacts, to monitor the pollution level and check trends, to develop control measures on human activities, and to introduce technological interventions to arrest and combat pollution threats.

Under the GEF/UNDP/IMO Regional Marine Pollution Programme for the East Asian Seas, we adopt a holistic, multisectoral, and integrated approach to address marine pollution coming from both land- and sea-based sources. I understand that the detailed activities of the Programme will be introduced during the workshop.

1996 is a busy year for the Programme. I wish to inform you that immediately following this workshop, there will be a Regional Meeting on Integrated Environmental Impact Assessments, to be convened in this same place beginning on 20 March. At the same time this week, a Marine Pollution Training Course will be conducted in Haiphong, Vietnam. By April, there will be an Inception Workshop of the marine pollution monitoring and information management network to be held in this same hotel. In late May, we are organizing an International Workshop on Integrated Coastal Management in Xiamen, China. By early June, the Programme will conduct a Workshop on Coastal Oil Spill Monitoring, Prediction, and Modelling in Pusan, Korea. Finally, there will be an Integrated Coastal Management Training Course in October and a Regional Conference on Sustainable Financing in November this year.

I am telling you all these just to let you know that there are active efforts currently being undertaken by the Programme in different parts of the region, in close collaboration with other national, regional and international agencies to address marine pollution from various approaches. Your legal network is one of them and I hope this network will work very closely with other initiatives and networks of this Programme.

I understand you will go into the details of the functions of the network during the workshop. I believe this is the first network on legal aspects of marine pollution in this region. Definitely, the formation of this network is a milestone in the regional and global efforts to combat marine pollution. This initiative also reflects the rising concerns and interest of legal experts of the region to play an active role in solving this global problem of mankind.

I wish to take this opportunity to pose a few challenges to the network members and hope that you will take up these challenges in your deliberation.

The **first challenge** is how the network can effectively contribute to the ratification and implementation of the marine pollution-related international conventions. How could the network assist the countries in the region to overcome their legislative difficulties in the ratification and implementation of such conventions as OPRC, MARPOL, FUND, and UNCLOS?

The **second challenge** is how the network can make itself a useful instrument to the national governments in the region for advice and technical assistance.

And the **final challenge** is how the network can continue its operations beyond the life of this Programme. In other words, is there a mechanism that will sustain its operations?

I hope you will have a very enjoyable stay in Manila. And I wish the workshop a success. Thank you.

ANNEX 4-C

OPENING ADDRESS
by Mr. Farouk Y. Tarzi
Officer-In-Charge,
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Greetings! Undersecretary Antonio G. M. La Viña of the Department of Environment and Natural Resources, Dr. Chua Thia-Eng, Programme Manager of the UNDP-GEF-IMO project, distinguished participants, guests, ladies and gentlemen, a pleasant good morning.

The marine environment plays a crucial role in maintaining ecological balance through complex processes. It also provides multiple economic benefits and serves as the livelihood base to the people.

As a result of land- and sea-based activities, the world's marine environment has been deteriorating. Chemical and biological pollution, overload of nutrients and sediments, siltation and sedimentation, petroleum exploration, and dumping at sea are only some of the factors contributing to the physical degradation or destruction of marine habitats and ecosystems.

Chapter 17 of the Agenda 21, the global blueprint for action adopted at the United Nations Conference on Environment and Development (UNCED) in 1992, emphasized the need to protect the oceans, seas and coastal areas, including the rational use and development of their living resources. Chapter 17 attempts to introduce the developmental dimension in a decisive way into the preparations for action to combat the degradation of the marine environment from land- and sea-based activities. It also calls for the preparation of national action plans for the incorporation of integrated coastal zone management into development. Developed and developing countries alike are encouraged to establish appropriate coordinating mechanisms for integrated management of coastal and marine areas, both at the local and national levels.

Ladies and gentlemen, we commend the members of the regional network of legal experts on marine pollution for participating in this workshop, as this addresses another major concern of the global Agenda 21, that of international law. The Earth Summit in 1992 specifically called for the participation of all countries in the creation of international treaties on sustainable development. It also called for the review and development of current international environmental laws to make them more effective and reflective of the concerns and interest of all nations. Marine pollution legislations and conventions are among the many facets of sustainable development that must be carefully studied in order to adequately address the degradation of the marine environment.

Land-based sources of pollution were only recently given attention when a process was initiated in the 1992 UNCED to review the Montreal Guidelines for the Protection of the Marine Environment From Land-Based Sources of Pollution. In November 1995, the Programme of Action for the Protection of the Marine Environment from Land-Based Activities was finalized in Washington D.C. The Global Programme of Action aims to assist states in taking actions that would lead to the prevention, control and reduction of the degradation of the marine environment. The land-based sources of marine pollution have been given increased emphasis in later years due to the fact that over 75 percent of the marine pollution in the world comes from these sources.

Other regional conventions have made ambitious recommendations and decisions for action to combat pollution from land-based sources. The 1992 Convention on the Protection of the Marine Environment of the Baltic Sea Area (or the Helsinki Convention) and the 1992 Convention for the Protection of the Marine Environment of the North-East Atlantic (or the Ospar Convention) are two instruments designed to combat land-based sources of marine pollution on a regional scale. These instruments introduced the use of the precautionary principle, the use of best available techniques and best environmental practice, including the "polluter pays" principle.

In the East Asian region, the United Nations Environment Programme has developed a Regional Programme of Action on Land-Based Activities Affecting Coastal and Marine Areas in the East Asian Seas. The approaches outlined in the Programme encourage governments in the East Asian region to develop appropriate national, bilateral, regional and multilateral programmes of action to protect the marine environment from land-based sources. The Programme also requires governments to establish, review or improve legislative, regulatory and monitoring programmes to control the quality of waste discharged or emissions into air, water and land, including the swift implementation of good planning and control of pollution from land-based sources.

The UNDP-GEF-IMO Regional Programme on the Prevention and Management of Marine Pollution in the East Asian Seas, on which this workshop is anchored, focuses on management and cost efficiency in addressing marine pollution problems on a regional basis. The Programme will strengthen regional capacity to manage marine pollution through demonstration of integrated coastal zone management and pollution risk management.

On top of the above regional conventions and programmes, this network of legal experts is faced with a long list of legislations on marine pollution. The United Nations Convention on the Law of the Sea (UNCLOS), the International Convention for the Prevention of Pollution From Ships (MARPOL 73/78), the International Convention on Oil Pollution Preparedness, Response, and Cooperation (OPRC 1990), and the London Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matters (LC 1972) are only some of the many important pieces of marine pollution legislations which need serious scrutiny by governments.

It is often said that we have enough of laws and legislations and that the main problem, indeed, is weak enforcement capacity on the part of governments to implement these laws. We trust that this regional network of legal experts on marine pollution will seriously address this concern with a view to assisting governments not only on the signing and ratification of conventions and protocols but more importantly on strengthening of technical capability to implement such legal instruments. There are also innovations which have emerged recently that could enhance or complement law enforcement. One of this is what has been referred to as "legal marketing" which capitalizes, among others, on the Asian cultural value of face-saving. A meeting of Asian environment lawyers recently discussed this innovative concept.

Ladies and gentlemen, the task ahead of us is not easy. The approaches to be taken must not only consider international and national legislations but also the diversity of the East Asian region in terms of environmental, economic and political characteristics.

We would like to thank the International Maritime Organization (IMO) for its partnership with us in implementing this programme. Our sincere gratitude also goes to the participants and to Undersecretary La Viña, as well as the host government of the Programme, the Philippines' Department of Environment and Natural Resources. I wish all of us a successful two-day workshop. Thank you.

OVERVIEW OF THE INTERNATIONAL INSTRUMENTS RELATING TO THE PROTECTION OF THE MARINE ENVIRONMENT OF EAST ASIA

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1.0 INTRODUCTION: DEFINITION AND SOURCES

This paper is intended to provide an overview of the major global and regional conventions governing pollution of the marine environment. It contains a brief description of the scope of the major conventions, presented in a historical context. The purpose of this paper is to bring all of the participants up to a certain minimum level of understanding about each of the instruments.

This paper describes the major instruments on the pollution of the marine environment. It does not deal with instruments governing the conservation and sustainable use of the living resources of the oceans. In Article 1 of the 1982 UN Convention on the Law of the Sea, "pollution of the marine environment" has been defined to mean:

> *the introduction by man, directly or indirectly, of substances or energy into the marine environment, including estuaries, which results or is likely to result in such deleterious effects as harm to living resources and marine life, hazards to human health, hindrance to marine activities, including fishing and other legitimate uses of the sea, impairment of quality for use of sea water and reduction of amenities.*

When most laymen think of marine pollution, they think of major oil spills, and television scenes of oil-soaked birds and beaches come immediately to their minds. However, oil pollution from ships, although the most dramatic and visible source of marine pollution, is not the only serious marine pollutant. In fact, it accounts for a relatively small amount of the marine pollution. According to the 1990 GESAMP Report on *The State of the Marine Environment*,[1] marine pollution is derived mainly from land-based sources and the atmosphere. In that report, it was estimated that the relative contribution of all potential pollutants from various human activities entering the sea is as follows:

Offshore Production	1%
Maritime Transportation	12%
Dumping	10%
Run-off and land-based discharges	44%
Atmosphere	33%

[1] Group of Experts on the Scientific Aspects of Marine Pollution (GESAMP), The State of the Marine Environment (UNEP, 1990) at 88.

2.0 GLOBAL INSTRUMENTS ON MARINE POLLUTION

2.1 THE POSITION PRIOR TO WORLD WAR II

Under the rules of customary international law governing the oceans, the principle of freedom of use was the prevailing norm. The resources of the oceans were regarded as inexhaustible. The oceans were also viewed as ideal dumping grounds which were so vast that they were not capable of being polluted through the activities of man.

The potential for ships to pollute the marine environment was recognized as early as the 1920's, and a conference was convened in Washington in 1926 to draw up a draft convention of pollution from ships. However, it was only after World War II that the international community began to realize that international action may be required to regulate pollution of the marine environment.

2.2 OIL POLLUTION CONVENTION, 1954

The 1954 International Convention on the Prevention of Pollution of the Sea by Oil was the first international convention to attempt to prevent pollution of the sea by oil from tankers. It prohibited the discharge of oil or oil mixture by tankers within prohibited zones. It originally applied to all sea-going ships over 500 tons or more, but was amended in 1962 to cover tankers of 150 tons or over.

Amendments were made to the 1954 Oil Pollution Convention in 1969 to provide for more stringent requirements for operational discharges which were consistent with the "load-on-top system" of operating which had been adopted by oil tankers. In 1971, the Convention was further amended to impose new standards on the construction of oil tankers.

2.3 GENEVA CONVENTION ON THE HIGH SEAS, 1958

The 1958 Geneva Convention on the High Seas contained only two provisions relating to marine pollution. Article 24 recognized the potential harmful effects of oil pollution from ships and from offshore oil exploration and exploitation. It placed an obligation on all states:

> *to draw up regulations to prevent pollution of the seas by the discharge of oil from ships or pipelines or resulting from the exploitation and exploration of the seabed and its subsoil, taking account of existing treaties on the subject.*

It thus had an indirect reference to the 1954 Convention, but only obliged states to take it into account.

Article 25 of the 1958 Convention contained two provisions relating to pollution of the marine environment. First, it required states to take measures to prevent pollution of the seas from the dumping of radioactive waste. Second, it provided that states had a general obligation with respect to 'activities with radioactive materials or other harmful agents'. States were obliged to cooperate with the 'competent international organizations' in taking measures in the prevention of the pollution of the seas from such activities.

2.4 IMO INTERNATIONAL MARITIME DANGEROUS GOODS CODE

This code was introduced by a resolution of the IMO Assembly in 1965. It classifies dangerous goods and sets out detailed requirements as to marking, labelling, packaging and documentation. It has been updated on a regular basis in response to developments in the shipping and chemical industries. It is widely observed and the IMO has recommended that states adopt it as the basis for national legislation. It supplements several IMO conventions and is essential for their effective implementation.

The IMDG Code is regularly amended. Amendments made in 1994 were so extensive that the entire 2500-page Code has been reprinted.

2.5 INTERVENTION AND CIVIL LIABILITY CONVENTIONS (1969) AND THE FUND CONVENTION (1971)

The *Torrey Canyon* disaster occurred in 1967, in which a Liberian tanker carrying over 119,00 tons of crude oil caused considerable pollution damage along the coasts of France and the United Kingdom. This prompted two international conventions in 1969 to deal with the problem of oil spills from maritime casualties -- the Intervention Convention and the Civil Liability Convention. These two conventions were supplemented by the 1971 Fund Convention.

(1) Intervention Convention, 1969

The Convention Relating to the Intervention on the High Seas in Cases of Oil Pollution Casualties was adopted in Brussels on 29 November 1969. It entered into force on 6 May 1975. On 1 November 1994, it had 62 parties; China is the only country from this region which is a party.

This treaty gives coastal states special powers to take self-help measures beyond the limits of their territorial sea following a maritime casualty involving oil pollution from ships which may reasonably be expected to result in major harmful consequences. Coastal states may take such measures as may be necessary to prevent, mitigate or eliminate grave and imminent danger to their coastline or related interests from pollution or threat of pollution of the sea by oil.

A Protocol adopted in 1973 extends the Convention to substances other than oil. The 1973 Protocol entered into force on 30 March 1983.

(2) Civil Liability Convention, 1969

The 1969 International Convention on Civil Liability for Oil Pollution Damage was also adopted in Brussels in 1969. It entered into force on 19 June 1975. On 1 November 1994, it had 88 parties, including the following countries from this region: China, Republic of Korea, Brunei, Indonesia and Singapore.

The 1969 Civil Liability Convention creates a scheme of liability for oil pollution damage caused by oil tankers. The Convention provides that the shipowner is strictly liable for oil pollution damage,

insurrection. They allow persons who suffer damage from oil pollution to have recourse directly against the owner of the vessel, without involving states. Under the 1969 Convention, the owner's liability is limited according to a formula related to the tonnage of the ship and the overall total, unless the incident occurred as a result of his actual fault.

The 1969 Convention was amended by a Protocol in 1976, which entered into force 8 April 1981. On 1 November 1994, the Protocol had 49 parties, including the following countries from this region: China, Republic of Korea, Brunei and Singapore.

(3) Fund Convention, 1971

The 1971 Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (1971 Fund Convention) was adopted in Brussels in 1971. It entered into force 16 October 1978. On 1 November 1994, it had 62 parties, including the following countries from this region: Republic of Korea, Brunei, Indonesia, and Malaysia.

The purpose of the 1971 Fund Convention is to establish a fund to provide additional compensation so that within the limits of the Fund's total liability, the victims are fully and adequately compensated. The fund is established from a levy on oil importers, who are mainly the oil companies whose cargoes the vessels are likely to be carrying. The 1969 Fund Convention provides that the owner who is liable under the 1969 Civil Liability Convention is entitled to have recourse to the fund in order to relieve a portion of his liability, even where the total amount of his liability does not exceed the limits established by the 1969 Convention.

The 1969 Fund Convention also provides compensation even where no liability for damage arises under the Civil Liability Convention, or where the shipowner is financially incapable of meeting his obligations under the Civil Liability Convention. The Fund Convention thus provides a form of security for claimants who have suffered pollution damage. However, the Fund established by the Convention is not available in certain exceptional circumstances, including where the claimant cannot prove that the damage resulted from an incident involving one or more ships.

2.6 STOCKHOLM CONFERENCE ON THE HUMAN ENVIRONMENT, 1972

The recognition of the need for international cooperation to prevent pollution of the marine environment was given further impetus by the 1972 Stockholm Conference on the Human Environment. The Stockholm Conference called upon all states to accept and implement existing legal instruments on the control of marine pollution. It also supported proposals for new conventions on dumping and pollution from ships.

2.7 LONDON CONVENTION, 1972

The proposals at the Stockholm Conference led to the adoption in the following year of the 1972 Convention on the Prevention of Marine Pollution by the Dumping of Wastes and other Matter (London Convention). Draft articles which had been prepared for the 1972 Stockholm Conference were adopted at an intergovernmental conference convened in London in which more than 90 states took part. The Convention entered into force on 30 August 1975. On 1 November 1994, it had 73 parties, including China, Republic of Korea and the Philippines.

The purpose of the London Convention is to regulate the dumping of wastes at sea. It regulates the deliberate disposal at sea of certain substances, including oily wastes, dredgings and land-generated wastes. It does not govern oil pollution caused by operational discharges from the normal operation of ships. Nor does it govern pollution caused by maritime casualties.

Under the London Convention, contracting parties pledge themselves to take all practicable steps to prevent the pollution of the sea by the dumping of waste and other matter that is liable to create hazards to human health, to harm living resources and marine life, to damage amenities or to interfere with other legitimate uses of the sea. Contracting parties are obliged to take effective measures to prevent marine pollution caused by dumping and to harmonize their policies in this regard.

Two provisions are of special interest to less developed countries. First, the obligation to take individual measures is "according to their scientific, technical and economic capabilities". Second, parties are obliged to promote support for other parties who require training of personnel, supply of equipment, and facilities for research and monitoring and disposal and treatment of waste.

The London Convention contains a 'black list' of Annex I substances that may not be dumped at sea; and a 'grey list' of Annex II substances that may be dumped subject to a special permit. Annex III contains criteria for determining whether other substances may be dumped at sea, pursuant to a general permit.

The International Maritime Organization (IMO) is the competent organization which is responsible for secretariat duties under the Convention. Contracting parties have obligations to make notifications on various matters to the IMO. The IMO convenes consultative meetings of the parties to review the implementation of the Convention, adopt amendments, promote regional cooperation, etc. Periodic reviews and amendments of the Convention are made through the regular Consultative Meetings. The Convention was amended in 1978. None of the countries in this region are parties to the 1978 amendments. Under a tacit amendment procedure, amendments to the annexes take effect for all parties within a certain time, unless they object within 100 days. Under this procedure, the annexes have been amended several times.

Beginning in 1991, the contracting parties to the London Convention began to adopt what might be described as a "precautionary approach" to ocean dumping. Under this approach, "appropriate preventive measures are taken where there is reason to believe that substances or energy introduced in the marine environment are likely to cause harm even where there is no conclusive evidence to prove a causal relation between outputs and their effects." The effect of the new amendments to the annexes has led to a complete ban on the dumping of radioactive waste, to a phase-out of the dumping of industrial waste and to a ban on the incineration of waste at sea.

The London Convention is supplemented by regional agreements in many parts of the world, but there is no regional agreement for the East Asian Seas region. For the most part, the regional agreements do not elaborate substantially on the 1972 Convention. In some respects, however, the regional agreements set the trend for proposed amendments to the London Convention. For example, the 1992 Baltic and Northeast Atlantic agreements expressly cover dumping in internal waters, which is not governed by the London Convention.

Proposals to amend the London Convention to include internal waters are currently under consideration. They will be considered at an IMO meeting in October 1996.

2.8 MARPOL CONVENTION, 1973/78

The Stockholm Conference was an impetus for the adoption of the 1973 Convention for the Prevention of Pollution from Ships (1973 MARPOL Convention) in the following year. The 1973 MARPOL Convention replaced the 1954 Convention. The 1954 Convention had not been particularly successful. Not all flag states were parties to it and the enforcement record of flag states which were parties was weak. The Stockholm Conference had called on states to accept and implement the available international instruments and to ensure compliance by vessels flying their flag.

This convention is known as the 1973/78 MARPOL Convention. The initial 1973 text was adopted by the IMO in 1973. Before it received a sufficient number of ratifications to enter into force, it was substantially amended by a protocol in 1978 to facilitate its entry into force. The Convention, as amended by the 1978 Protocol, entered into force on 2 October 1983. On 1 August 1995, it had 95 parties, including the following countries from this region: China, Republic of Korea, Brunei, Indonesia, Singapore and Vietnam. The parties comprise more than 92 percent of the gross registered tonnage of the world's merchant fleet.[2]

The object of the Convention is to prevent the pollution of the marine environment by the operational discharge of oil and other harmful substances and to minimize the accidental discharge of such substances. States parties are obliged to apply the provisions of the convention to ships flying their flag and to ships within their jurisdiction.

The Convention has had a major impact on the construction of tankers, and in practice, all tankers built after 1975 have been built to meet MARPOL requirements. In practice, the vast majority of ships today conforms to MARPOL standards.

Amendments adopted in 1992 and which entered into force in 1995 impose new standards to improve the safety of tankers. All new tankers ordered after July 1993 of 5,000 dwt and above must be fitted with double bottoms and double hulls. In addition, the construction requirements for tankers of 25 years of age or above (those built prior to 1970) were amended to require the mandatory fitting of double hulls or an equivalent design. In addition, the 1992 amendments provided for an enhanced system of inspection for oil tankers aged five years and above. The effect of these amendments is likely to be that ageing tankers which were constructed prior to the MARPOL Convention will be either upgraded to modern standards or scrapped.

Implementation of the Convention is based in part upon the right of inspection by port states. Parties are obliged to cooperate in the detection of violations and the enforcement of the provisions of the convention. Ships in the port or offshore terminals of any party to the Convention are required to hold certificates issued pursuant to the Convention, and are subject to inspection by the port state to verify the certificate. If any ship in port does not carry a valid certificate, or if there are clear grounds for believing that the condition of the ship or its equipment does not correspond substantially with the

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[2] IMO NEWS, No. 3, 1995, page v.

particulars of its certificate, a more detailed inspection is required. In such case, the party carrying out the inspection is obliged to take such steps as will ensure that the ship shall not sail until it can proceed to sea without presenting an unreasonable threat of harm to the environment.

The MARPOL Convention relies mainly on technical measures to limit oil discharges, including standards for the construction of new oil tankers. Discharges of small quantities of oil are permitted, but only when the vessels are enroute and more than 50 miles from land. The Convention allows that certain areas can be designated as 'special areas' where all discharges are prohibited.

The Convention is not confined to oil pollution. It also regulates other types of pollution caused by the operation of ships, including the carriage of noxious liquids in bulk and garbage. The Convention contains five annexes which contain regulations governing different types of pollutants. The annexes are:

Annex I	Oil Discharges
Annex II	Noxious Liquid Substance Discharges
Annex III	Harmful Substances in Packaged Form and Containers
Annex IV	Sewage Discharges
Annex V	Garbage Discharges

As of January 1, 1995, all of the annexes were in force except Annex IV on Sewage Discharges. All parties are bound by Annexes I and II. The Republic of Korea has accepted all of the annexes, China has accepted Annexes III and V, and Singapore has accepted Annex III.

States parties to the MARPOL Convention are obligated to supply reception facilities. However, the record of port states in supplying such facilities has not been good in some parts of the world because of financial constraints. Another problem for implementation by port states is the cost of administering a system of inspection and enforcement, including the training of the necessary personnel.

It has also been observed that there has been a lack of effective implementation of the Convention by many flag states. Among the reasons cited for this is a lack of trained and experienced personnel to carry out the inspections, especially the need to train and retain qualified and experienced surveyors.

It is generally believed that the participation costs for developing countries will be reduced if there is cooperation on a regional basis in implementing the Convention. Under Article 17 of the Convention, states parties are obligated to promote, in consultation with the IMO and with assistance and cooperation from UNEP, support for parties requesting assistance for the training of scientific and technical personnel and the supply of necessary equipment and facilities for reception and monitoring. Another benefit of regional cooperation is the standardization of rules and procedures.

2.9 IMO CONVENTIONS ON MARITIME SAFETY

Other IMO conventions and instruments, although technically dealing with maritime safety, are also relevant to prevention of pollution of the marine environment. The most important of these are the: (a) 1974 Convention on Safety of Life at Sea (SOLAS); (b) 1972 International Regulations for

Preventing Collisions at Sea (COLREG); (c) 1978 Standards of Training, Certification, and Watchkeeping; and (d) the Protocol of 1978 relating to the International Convention for the Safety of Life at Sea.

2.10 UNITED NATIONS CONVENTION ON THE LAW OF THE SEA, 1982

In 1973, the Third UN Conference on the Law of the Sea was convened. The deliberations lasted for nine years and resulted in the 1982 Convention on the Law of the Sea. The 1982 Convention was intended to provide a global constitution for the oceans. It entered into force on 16 November 1994. The following states in the region are parties: Indonesia, the Philippines, Singapore and Vietnam.

The 1982 Convention is of critical importance because it is increasingly regarded as a constitutional document which sets out the basic legal framework for the oceans. It is a major law-making treaty which has significance for all states, whether or not they are parties to it. As a law-making or constitutional document, it can be regarded as the "best evidence" of the existing rules of general international law governing the oceans. All of the global conventions covering specific areas, such as the IMO and UNEP conventions, are generally read subject to the 1982 Convention. Subsequent documents of fundamental importance, such as Chapter 17 of Agenda 21, are also read so as to be consistent with the 1982 Convention.

The 1982 Convention is the strongest comprehensive environmental treaty now in existence. It established for the first time a comprehensive legal framework for the protection and preservation of the marine environment. It is significant because it represents the first attempt to set out in a global convention a general framework and structure for a legal regime which establishes the obligations, responsibilities and powers of states in matters of marine environmental protection.

(1) General provisions

Prior to the 1982 Convention, states had the *right* to pass legislation to protect and preserve the environment, but no clear *duty* to do so. The 1982 Convention represents a major change because in Article 192 it places an affirmative obligation on states to take action to preserve and protect the marine environment. Article 193 recognizes that although states have a sovereign right to exploit their natural resources, they must do so pursuant to their environmental policies and *in accordance with their duty to protect and preserve the marine environment*. To this extent, the provision recognizes that the sovereign right of states to exploit their natural resources is subject to their obligations to protect and preserve the marine environment.

Article 194 provides that states shall take all measures consistent with the Convention to prevent, reduce and control pollution of the marine environment *from any source*. It recognizes that because of different levels of development and expertise, all states may not be able to take the same measures. It provides that states must use the *best practicable means at their disposal and in accordance with their capabilities*. Nevertheless, states are obliged to take all measures necessary to ensure that activities under their jurisdiction or control are so conducted as not to cause damage by pollution to other states and their environment. States are also obliged to take measures to ensure that pollution arising from incidents or activities under their jurisdiction or control does not spread beyond the areas where they exercise sovereign rights in accordance with the 1982 Convention. Article 194 also provides that the measures taken in accordance with this Part *shall include* those necessary to protect

and preserve *rare or fragile ecosystems as well as the habitat of depleted, threatened or endangered species and other forms of marine life.*

(2) Pollution from the various sources

The 1982 Convention represents an important advance over the prior law because it addresses all of the sources of marine pollution. It obligates states to adopt laws and regulations to prevent, reduce and control pollution from ships, dumping, sea-bed operations, land-based sources and the atmosphere. States are also obligated to harmonize their policies at the regional level and co-operate to develop international rules. Clear and precise obligations are set out with respect to pollution from dumping and from vessels, and these obligations are linked to existing IMO conventions by indirect reference. More general obligations are set out for other sources of pollution, such as pollution from sea-bed activities, pollution from the atmosphere and pollution from land-based activities.

(3) Links to IMO Conventions

The provisions of the Convention concerning pollution from ships and from dumping contain some important principles and rules. The provisions are significant because they incorporate by implication the provisions of other major environmental conventions such as the 1972 London Convention and the 1973/78 MARPOL Convention. In certain cases the international rules and standards established in the IMO conventions are established as a "minimum". States are obliged in certain cases to apply rules and standards no less onerous than "generally accepted international rules and standards". In other cases, the international rules and standards act as a "maximum". For example, in certain cases coastal states are permitted (but not obliged) to pass laws and regulations, and if they do, they must be laws and regulations "conforming to and giving effect to generally accepted rules and standards".

In other words, the 1982 Convention uses the IMO conventions to define the detailed content of the obligations on states to protect the marine environment from pollution from ships and from dumping. Although there is some disagreement on the precise legal effect of these provisions, their effect seems to be that states which become parties to the 1982 Convention will be under an obligation to adopt the rules and standards set out in many of the major IMO conventions, even if they are not parties to the IMO conventions. This is an important step forward in the development of international law relating to the protection of the marine environment as it ties certain states to the international standards in the IMO conventions even though they may not have accepted those conventions.

Also, it should be noted that there is nothing in the 1982 Convention which is inconsistent with the provisions of the 1969 Intervention Convention relating to the right of coastal states to take measures to avoid pollution arising from maritime casualties. Neither is there anything in the 1982 Convention which is inconsistent with the liability regimes established in the Civil Liability and Fund Conventions.

(4) Pollution from ships

The provisions on pollution from ships are among the most detailed in the Convention. They attempt to strike a balance between the interests of coastal states and maritime interests.

With respect to *flag states*, the generally accepted international rules and standards are the minimum. Article 211(2) obliges flag states to adopt laws and regulations which *at least have the same effect* as the international rules. (This provision should be read together with Article 94, which addresses in part the problem of flags of convenience. Article 94 sets out new, stricter duties on flag states with respect to vessels flying their flag, including duties regarding the safety of navigation which are set out in IMO conventions.)

With respect to *coastal states*, the rules in Article 211 are complex and complicated. With respect to vessels entering their ports or internal waters, the Convention makes it clear that coastal states have the power to establish their own requirements relating to pollution from ships as a condition of entry of foreign ships into their ports or internal waters. This power, if used as the basis for a cooperative agreement among port states within a region, provides the legal basis for regional port state control. It enables port states to impose international rules and standards such as those set out in the MARPOL Convention on all vessels entering the ports in the region.

With respect to vessels passing through their territorial sea, coastal states have the power under Article 211(4) to establish requirements relating to pollution from foreign vessels. (See also Art. 19(2)(b) and Art. 21.) The powers of the coastal states are more limited with respect to pollution from foreign ships in their exclusive economic zone. Under Article 211(5), coastal state regulations governing pollution from ships in their Exclusive Economic Zone *must conform to and give effect to* generally accepted international rules and standards. However, article 211 of the Convention gives coastal states the power, in consultation with the competent international organization (IMO), to designate *special areas* where it can apply stricter rules and standards.

The powers of the coastal state to pass laws and regulations governing foreign ships are also more limited with respect to ships exercising the right of transit passage through international straits or archipelagic sea lanes passage through archipelagoes. Under Article 42, states bordering straits may adopt laws and regulations for the prevention, reduction and control of pollution, by *giving effect to* applicable international regulations regarding the discharge of oil, oily wastes and other noxious substances in the strait (i.e., 1973/78 MARPOL regulations). Article 39 provides that ships exercising the right of transit passage are required to comply with generally accepted international regulations, procedures and practices for the prevention , reduction and control of pollution from ships. Under Article 54, these same two provisions apply to archipelagic sea lanes passage.

The provisions on enforcement recognize that the flag states are still the most important, but they also give increased powers to coastal states and port states. The 1982 Convention contains one important development concerning pollution from ships. Article 220 of the 1982 Convention gives increased powers to *port states* to take action against a vessel in respect of any discharge from that vessel, even if the discharge was in one of the maritime zones of another state. For example, if a vessel in voluntarily in port in State A is believed to have committed a discharge violation which has occurred in and caused or threatened damage to the internal waters, territorial sea or exclusive economic zone of State B, State A is required, as far as practicable, to comply with a request from State B for investigation of the discharge violation. Therefore, if the 1982 Convention becomes universally acceptable, major port states are likely to play an increasingly important role in the enforcement of laws and regulations concerning pollution from ships.

(5) Pollution from dumping

Dumping is defined in Article 1 of the 1982 Convention. Article 210 obligates states to adopt laws and regulations, and take such other measures as may be necessary, to prevent, reduce and control pollution of the marine environment by dumping. It further provides that such laws, regulations and measures shall *be no less effective* that the global rules and standards. It is generally accepted that the global rules and standards referred to in Article 210 are those set out in the London Convention.

The 1982 Convention specifically covers one issue which is not clearly set out in the London Convention. It provides that no dumping can be carried out within the territorial sea and the exclusive economic zone or onto the continental shelf without the express prior approval of the coastal state. It also makes it clear that coastal states have the power to regulate or prohibit dumping in such areas.

Article 216 provides that the laws and regulations and dumping shall be enforced by the coastal state with respect to dumping within its territorial sea or its exclusive economic zone or onto its continental shelf, and by the flag state with respect to vessels flying its flag. It does not provide for enforcement by port states.

(6) Pollution from land-based sources

It is generally recognized that the weakest environmental provisions in the 1982 Convention relate to pollution from land-based sources, even though it is estimated that as much as 70 percent of marine pollution is from land-based sources. The obligation on states with respect to land-based sources of pollution is set out in Article 207. It is only to *take into account* internationally agreed rules, standards and recommended practices and procedures. Furthermore, the obligation on states to endeavour to establish global and regional standards with respect to land-based sources of marine pollution expressly provides that *the economic capacity of developing states and their need for economic development* must be taken into account.

The weaker provisions with respect to land-based sources of marine pollution reflect the lack of consensus in the international community on the establishment of agreed rules and standards in this area, as well as the debate between developed and developing states on the proper balance between development and the environment. It should also be noted that at the time of the 1982 Convention there was no global instrument governing land-based sources of marine pollution.

(7) Implementation of marine pollution provisions

Most coastal states who benefited from the new entitlements under the 1982 Convention, such as the sovereign right over the resources in the exclusive economic zone, have been very quick to enact laws and regulations claiming sovereign rights over the resources within their exclusive economic zone. The same states have been much slower, however, in adopting the laws and regulations which they are required to take under Chapter XII of the 1982 Convention.

For example, those states which have ratified the 1982 Convention have a legal obligation to enact laws and regulations to prevent, reduce and control pollution of the marine environment by dumping, and such laws and regulations must be at least as effective as those of the London Convention.

However, many states which have ratified the 1982 Convention still have no laws and regulations preventing ocean dumping by ships flying their flags.

2.11 UNEP GUIDELINES AND CONVENTIONS

In the 1980s, the following international instruments of relevance to the marine environment were promulgated by UNEP: (1) the 1982 Guidelines Concerning the Environment Related to Offshore Mining and Drilling Within the Limits of National Jurisdiction; and (2) the 1985 Montreal Guidelines for the Protection of the Marine Environment from Land-based Sources; and (3) the 1989 UNEP Guidelines and Standards for the Removal of Offshore Installations and Structures on the Continental Shelf and in the Exclusive Economic Zone. In addition, an important UNEP convention adopted in 1989, the Basel Convention on the Control of the Transboundary Movement of Hazardous Wastes and their Disposal, represented the first global attempt to regulate the transboundary movement of hazardous waste.

(1) Montreal Guidelines on Land-based Marine Pollution, 1985

No global treaty exists for the control of land-based sources of marine pollution. Regional agreements exist in several areas, but not in this region.

In 1985, UNEP adopted a non-binding instrument known as the Montreal Guidelines for the Protection of the Marine Environment Against Pollution from Land-based Sources. These guidelines offer a checklist for the national legislation, as well as for the development of global, regional or sub-regional agreements. The guidelines call for the negotiation of internationally agreed rules and standards. The annexes give guidance on control strategies and the classification of substances.

(2) Basel Convention, 1989

This UNEP Convention is entitled the Convention on the Control of the Transboundary Movements of Hazardous Wastes and their Disposal. It is a global convention designed to minimize and control international trade in hazardous waste. The Convention entered into force on 5 May 1992. On 31 December 1994, it had 80 parties, including China, Japan, Republic of Korea, Indonesia, Malaysia, Singapore and Thailand.

It governs the transboundary movement of hazardous substances produced on land which are disposed of or intended for disposal, excluding radioactive waste. Hazardous wastes are listed in Annexes to the Convention. It regulates the export of hazardous waste to another state or the passage of such waste through another state. Its regulatory regime is based upon the principle of prior informed consent.

The Basel Convention is not directly on marine pollution. However. it is related to other marine pollution conventions in the sense that it forms an integral part of a regime governing the movement of hazardous waste. The 1972 London Convention controls the dumping of such wastes in the oceans, the 1973/78 MARPOL Convention regulates the manner of storing and packing such substances during transit on the oceans, and the Basel Convention regulates their transboundary movement to other states, including the transit of such substances through other states.

Ships carrying hazardous substances are regulated by the 1973/78 MARPOL Convention and by the IMO International Maritime Dangerous Goods Code. The Basel Convention further provides that packaging, labelling and transporting of such substances should conform to 'generally accepted rules and standards' and take account of 'internationally recognized practices', whether or not they are obligatory. Thus, like the 1982 Convention on the Law of the Sea, it contains an indirect reference to standards established in other conventions.

It has been recognized that there is a need to study whether all of the provisions of the Basel Convention, the 1972/78 MARPOL Convention and the 1972 London Convention are compatible. There is also a need for states to understand that the three conventions complement one another and that there may be gaps or *lacunae* in their laws if they do not ratify and implement all three conventions. Therefore, there is a need for states to ensure that the domestic legislation implementing the three conventions are consistent with one another.

2.12 CONVENTION ON OIL PREPAREDNESS, RESPONSE AND COOPERATION, 1990

In 1990, following the *Exxon Valdez* disaster off the coast of Alaska, the IMO adopted a global instrument entitled the Convention on Oil Pollution Preparedness, Response and Cooperation which sets out general obligations for cooperation and assistance to deal with major oil pollution incidents. Its purpose is to help Governments combat major oil pollution incidents. It entered into force on 13 May 1995, one year after being accepted by 15 states. No states in this region are parties.

The Convention is intended to encourage the establishment of oil pollution emergency plans on ships and offshore installations, and at ports and oil handling facilities. It also is intended to encourage the establishment of national and regional contingency plans and a framework for international cooperation.

Amendments to the 1973/78 MARPOL Convention were adopted in 1991 in response to this Convention. The amendments, which came into force in 1995, require oil tankers of 150 gross tons and above to carry a shipboard oil pollution emergency plan adopted in accordance with IMO guidelines.

2.13 UNCED -- CHAPTER 17 OF AGENDA 21

The major development in the 1990s with respect to marine pollution came out of the 1992 UN Conference on the Environment and Development (UNCED, or Earth Summit) in the form of an action plan rather than a global convention. Chapter 17 of Agenda 21 contains recommendations and guidelines relating to the pollution of the marine environment from the various sources.

Chapter 17 of Agenda 21 is not a binding legal instrument. It is an action plan designed to give guidance to states on how to develop strategies and plans to protect and preserve the marine environment at the global, regional and national levels. It recognizes that the 1982 UN Convention on the Law of the Sea sets out the basic framework with respect to the rights and responsibilities of states with respect to the marine environment and marine pollution. It calls upon states to ratify and effectively implement the existing treaties governing all sources of marine pollution. Its major

contribution is that it emphasizes the need for an integrated approach to marine and coastal areas. It also recognizes the need for greater cooperation at the regional and sub-regional levels.

The relevant provisions of Chapter 17, especially those on institutional development, capacity building, training, and regional cooperation, should be carefully studied by this Network of Legal Experts.

2.14 PROTOCOLS TO THE CIVIL LIABILITY AND FUND CONVENTIONS, 1992

In 1984, amendments to the 1969 Civil Liability Convention and 1971 Fund Convention were adopted. The major purpose of the amendments was to increase the amount of compensation payable to victims of oil pollution incidents under the two conventions. The approximate limit to shipowners under the Civil Liability Convention was US$22 million; further compensation under the Fund Convention could bring the maximum total amount to approximately US$93 million. These amounts were clearly not adequate in the case of major oil incidents.

The 1984 Protocols never entered into force, largely because the United States refused to accept them because it felt the maximum limits proposed were too low. Also, the requirements for entry into force of the 1984 amendments were too onerous. The 1984 Protocols were replaced and superseded by the 1992 Protocols. The less onerous requirements for entry into force of the 1992 Protocols have been met, and they will enter into force 30 May 1996. No states in this region have become parties to the 1992 Protocols.

The 1992 Protocols have the same substantive provisions as those adopted in 1984. They amend the conventions in order to widen their scope of application and provide higher limits of compensation. In order to widen the pool of potential contributors to the Fund, they lower the threshold of annual oil imports at which a liability to contribute arises. They substantially increase the liability of the shipowner, from a limit of $22 million to a limit of $92 million. The total amount of compensation payable by the Fund under the 1992 Protocol is increased from $92 million to $208 million.

Other changes are also introduced in the 1992 Protocols. First, shipowners will bear the full costs up to the limit of their total liability under the Civil Liability Convention. The Fund's resources will only be available for losses above the shipowner's limit. Second, the 1992 Protocol attempts to clear up ambiguities with respect to compensation for damage to the environment. Under the 1992 Protocol, compensation for environmental damage is limited to "the costs of reasonable measures of reinstatement actually undertaken or to be undertaken". The new definition also allows recovery for loss of profit arising out of impairment of the environment.

2.15 GLOBAL PROGRAMME OF ACTION ON LAND-BASED ACTIVITIES, 1995

The major weakness of the efforts of the international community has been the failure to deal effectively with marine pollution caused by land-based activities, which accounts for nearly 80 percent of all marine pollution. In 1995, an attempt was made to deal with this complex problem. An Intergovernmental Conference to Adopt a Global Programme for the Protection of the Marine Environment from Land-based Activities was held in Washington, D.C. from 23 October to 3 November, 1995. The Conference, which was organized by UNEP in response to recommendations made at the UNCED Conference in Rio de Janeiro in 1992, unanimously adopted a detailed Programme of Action aimed at preventing the further degradation of the marine environment from

land-based activities. The Programme of Action not only identifies the problems and ecosystems under threat, but also recommends specific practical actions at international, regional and national levels to address it.

2.16 DRAFT HNS CONVENTION, 1996

A draft for liability and compensation in connection with the carriage of hazardous and noxious substances (HNS) by sea has been prepared by the legal committee of the IMO and will be considered for adoption at a diplomatic conference in 1996. The draft HNS Convention establishes a system for compensation and liability covering in principle all kinds of hazardous and noxious substances.

The draft convention introduces strict liability for the shipowner, with higher upper limits than are available under existing general limitation regimes. It also introduces a system of compulsory insurance and insurance certificates. The shipowner's liability is supplemented by an HNS Fund, which is financed by cargo interests. Contributions to the HNS Fund will be levied on persons within the territory of contracting parties who receive a certain minimum quantity of HNS cargo during a calendar year.

The draft HNS Convention goes further in its scope than the oil pollution compensation regime in that it covers not only pollution damage but also the risks of fire and explosion. The draft convention defines its scope of application by reference to existing lists of hazardous substances in other instruments, such as the lists in Annex II to the 1973/78 MARPOL Convention and in the International Maritime Dangerous Goods Code (IMDG).

3.0 REGIONAL INSTRUMENTS ON MARINE POLLUTION

3.1 UNEP REGIONAL SEAS PROGRAMME - EAST ASIAN SEAS

UNEP initiated a Regional Seas Programme in 1974. It covers ten geographic areas. The UNEP Governing Council has repeatedly endorsed a regional approach to the control of marine pollution and has requested the development of regional action plans. Regional action plans have either been adopted or are under development in all of the regions. Most of these action plans make provision for environmental assessment, management, legislation, and institutional and financial arrangements. Most also include arrangements for combating major incidents of marine pollution. Most of the regional seas programmes are supported by framework regional treaties.

Although there is an Action Plan for the East Asian Seas, there is no supporting regional treaty. After preparatory studies and meetings in 1979 and 1980, an Action Plan for the Protection and Development of the Marine Environment and Coastal Areas of the East Asian Region (UNEP/IG.26/6, Annex IV) was adopted in 1981. The Inter-governmental Meeting to adopt the plan was attended by representatives of Indonesia, Malaysia, the Philippines, Singapore and Thailand.

The East Asian Seas Action Plan was revised in 1994 [UNEP(OCA)/EASIG5/6]. The Coordinating Body on the Seas in East Asia (COBSEA), which is based in Bangkok, is the overall authority to determine the content of the action plan, to review its progress and to approve its programme of

implementation, including the financial implications. When it was revised in 1994, it was envisaged that COBSEA would be extended to include all countries bordering the East Asian Seas. The following countries are now participating in the East Asian Seas Action Plan: Australia, People's Republic of China, Kingdom of Cambodia, Indonesia, Republic of Korea, Malaysia, the Philippines, Singapore, Thailand and Socialist Republic of Vietnam.

3.2 ASEAN STRATEGIC PLAN OF ACTION ON THE ENVIRONMENT 1994-1998

This action plan recognizes the fact that the marine environment is under stress in ASEAN. It also recognizes that one of the necessary "strategies" is to strengthen institutional and legal capacities to implement international agreements on the environment. It also recognizes the need to enhance collaboration with international bodies overseeing the implementation of international agreements and cooperation. Unfortunately, it did not focus sufficiently on the pollution of the marine environment, and concentrated instead on the hot issues of the 1990s such as the regulation and control of toxic chemicals and hazardous wastes, the maintenance of biodiversity, and integrated management and sustainable development of coastal areas.

3.3 ASIA-PACIFIC MEMORANDUM OF UNDERSTANDING ON PORT STATE CONTROL, 1993

The 1993 Memorandum of Understanding (MOU) on Port State Control in the Asia Pacific Region was signed in Tokyo on 1 December 1993. The MOU was signed by the maritime authorities of the following counties: Australia, Canada, People's Republic of China, Fiji, Hong Kong, Indonesia, Japan, Republic of Korea, Malaysia, New Zealand, Papua New Guinea, the Philippines, Russian Federation, Republic of Singapore, Solomon Islands, Thailand, Republic of Vanuatu and the Socialist Republic of Vietnam.

This MOU, although not a legally binding document, recognizes that enhanced regional cooperation and effective action by port states are required to prevent the operation of substandard ships. It aims to strengthen cooperation and the exchange of information among port states in the region and to establish an improved and harmonized system of port state control.

As a preliminary target, the states agreed to endeavour to attain a regional annual inspection rate of 50 percent of the total number of ships operating in the region by the year 2000. In implementing this Memorandum, the Authorities agreed to carry out inspections, which will consist of a visit on board a ship in order to check the certificates and documents relevant for the purposes of the Memorandum. In the absence of valid certificates or documents, or if there are clear grounds for believing that the condition of a ship or its equipment or crew does not substantially meet the requirements of a relevant instrument, a more detailed inspection will be carried out. The relevant instruments on which regional port state control is based are:

1. the International Convention on Load Lines 1966;
2. the International Convention for the Safety of Life at Sea, as amended;
3. the Protocol of 1978 relating to the International Convention for the Safety of Life at Sea, 1974;
4 the International Convention for the Prevention of Pollution from Ships 1973, as modified by the Protocol of 1978 relating thereto;

5. the International Convention on Standards for Training, Certification and Watchkeeping for Seafarers, 1978;
6. the Convention on the International Regulation for Preventing Collisions at Sea, 1972; and
7. the Merchant Shipping (Minimum Standards) Convention, 1976 (ILO Convention No. 147).

3.4 REGIONAL OIL SPILL CONTINGENCY PLANS

An ASEAN Oil Spill Contingency Plan was conceived in the 1980s but has still not been adopted. The delay in its adoption has in part been the result of difficulties encountered in putting into effect national contingency plans.[3]

The ASEAN Council on Petroleum (ASCOPE), an association of national oil companies, has developed a plan for its members.

In 1992, the five major oil companies in the region established the East Asia Response Ltd (EARL). EARL is a private company based in Singapore. It can provide prompt and efficient response to oil spill incidents in the region. It also provides training and consultancy services on oil spill responses.

5.0 CONCLUSION

In this paper I have attempted to provide an overview of the major international and regional instruments relating to marine pollution in this region. Many of the conventions are highly technical in nature, and it is doubtful whether any of us can claim to be knowledgeable about the details of all of them. It is important, however, that we all have a broad overview of the various instruments which exist before we undertake a detailed examination of any one instrument. I hope that this paper has been of some assistance in providing this overview.

As this paper demonstrates, there is no lack of global conventions and other instruments to control marine pollution. The international community is not in dire need of new conventions. What is needed is effective implementation at the regional level of the existing conventions and instruments. The number of ratifications by states from this region of the major global conventions is sorely inadequate. Also, this region is one of the few regions in the world where there are no regional conventions to supplement the major global conventions and adapt them to meet the particular needs and circumstances of the region. One of the first tasks of this Network will be to try to determine why this is the case.

As members of this Network, it will be our responsibility to examine many of these conventions and discuss the following questions:

1) Would it be in the best interests of the marine environment if the states in this region were to ratify and effectively implement these conventions?

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[3] Chia Lin Sien, *Comments*, in *Sustainable Development of Coastal and Ocean Areas in Southeast Asia: Post Rio Perspectives* (Koh, Beckman & Chia, editors, 1995).

2) What are the major impediments to states in the region ratifying the conventions, and how can these impediments be overcome?

3) What are the major impediments to the effective implementation of each of the conventions by the states in the region?

4) Can enhanced cooperation among legal experts from the states in the region help overcome some of these impediments?

5) Would greater cooperation and coordination among the states in the region in the implementation of the conventions, including the harmonization of domestic laws and regulations, and the harmonization of standards, practices and procedures, enhance the effective implementation of the conventions at the regional level?

6) Would it be in the best interests of the states in the region if they adopted regional conventions or instruments which complement and supplement some of the global conventions and which take into consideration the particular characteristics, needs and interests of the region?

I hope that in our discussions over the next two days we will begin in earnest to address many of these questions.

GUIDELINES FOR COUNTRY REPORTS ON MARINE POLLUTION LEGISLATION

1.0 Existing national legislation/regulations on marine pollution and their implementation

1.1 Marine pollution by major source

- Land-based sources of pollution
  - waste (municipal, industrial, hazardous, others)
  - runoff
  - rivers, atmosphere, and others
- Ocean dumping
- Vessel-source pollution
- Pollution from seabed activities

1.2 Legal regime of liabilities for marine pollution damages

1.3 Requirements for EIA and actual practice

1.4 Requirements for the use of market-based instruments (e.g., pollution penalties, effluent discharge fees, user fees, etc.)

2.0 National Legislative/Regulatory Structure and Procedures on Marine Pollution (attach diagram for illustration if possible)

2.1 Distribution of mandates and obligations

2.2 Role of non-government organizations (NGOs)

2.3 Requirements for public participation

3.0 Implementation of international instruments

3.1 Specific instruments implemented

3.2 Extent of implementation

3.3 Reasons for non-ratification or non-implementation (identification of constraints)

4.0 Assessment of the country's needs in capacity building for legislation and ratification of international conventions on marine pollution

Note: The written report can be as detailed as necessary. Oral presentation at the Workshop shall be limited to 15 minutes for each country.

ANNEX 7

COUNTRY REPORTS
ON
MARINE POLLUTION LEGISLATION

MARINE POLLUTION LEGISLATION IN CAMBODIA

Sam Chamroeun

1.0 INTRODUCTION

Cambodia is a country covering an area of 181,535 km^2. It is situated in Southeast Asia, forming part of the southwestern portion of the Indochinese peninsula between latitudes 10° and 15° north and longitudes 102° and 108° east. The country's maximum extent is about 580 km from east to west and 450 km from north to south. Cambodia shares its 2,438-km border with Thailand in the west and north, Laos in the north, and Vietnam in the east and southeast. In the southwest Cambodia is bordered by the Gulf of Thailand.

Cambodia has a 435-km coastline on the Gulf of Thailand that extends from the Thai border to the Vietnamese border. It consists of a large estuary in the northern Koh Kong province and the large bay of Kampong Som. Two provinces and two autonomous cities lie along the coastline with a total population of about 640,000. About 446,000 people live in Kampot province, 121,079 in the city of Sihanoukville, 70,000 in Koh Kong province, and the rest in the resort city of Kep. Four main islands and a number of small islands are located near the shore. There are three main islands located farther offshore: Koh Tang, Koh Pring and Koh Polowaii.

Marine Zone: The diverse Cambodian coastline includes sandy, muddy and rocky shores, as well as seagrass flats and coral reefs similar to those of the nearby Thai provinces of Chantaburi and Trat. These waters are likely to have *dugongs* and sea-turtles as well as dolphins, which are becoming increasingly rare in other part of the Gulf.

In comparison to other parts of the Gulf of Thailand, Cambodian waters have been lightly exploited with catches-per-unit of effort being reportedly ten times those in the adjacent depleted waters.

2.0 STATUS OF MARINE POLLUTION IN CAMBODIA

Due to two decades of war, Cambodia at present has little development in its coastal area and marine zone because of the relatively low level of industrial activity in its coastal area. So the problem of marine pollution in Cambodia is not yet serious and the water quality of its coastal and marine areas generally appears to be good, but there are localized water quality problems near shrimp farms likely due to poor management practices.

2.1 DOMESTIC SEWAGE

There is only a little amount of domestic sewage discharged into the sea at present in Kampot and Koh Kong provinces because their population density is only 6-7 persons per square kilometre and because the inhabitants live away from the coastal area.

The most extensive municipal sewage pollution is found in the coastal city of Sihanoukville which has a density of 340 persons per square kilometre. The domestic sewage is discharged directly into the sea without treatment. Inadequately treated domestic sewage may introduce pathogens to the coastal receiving waters, which are of potential harm to human and other living organisms, reduce oxygen in the waters and result in poisoning of aquatic life by heavy metals and organic toxins.

2.2 INDUSTRIAL WASTES

At present, the discharge of chemical waste into the sea from the industrial sector is not a considerable problem in Cambodia because the level of industrial development in the coastal provinces, as in the whole of Cambodia, is low. In Kompot province, there are two factories -- one produces phosphate fertilizer and the other cement. In Sihanoukville, there are also two factories -- one is a beer brewery enterprise and the other one an oil refinery that is not functioning at the moment.

The liquid wastes of these factories have been discharged into the sea without treatment. Recently the government of Cambodia announced plans to establish an industrial zone of 900 hectares and an export processing zone of 260 hectares in Sihanoukville. The Ministry of Environment must have authority to prevent the marine pollution in the near future.

2.3 AGRICULTURAL WASTE

The problem of marine pollution from agricultural wastes in Cambodia is very small at the moment because agricultural land accounts for only about 12 percent of the total land of the coastal provinces, and it is located far away from the coastal area and the marine zone. Moreover, Cambodian farmers use relatively few artificial pesticides and fertilizers.

2.4 SHRIMP FARMING

At the moment, the Cambodian Government is addressing problems that are related to shrimp farming. Intensive shrimp ponds are being constructed in cleared mangrove areas in Koh Kong province near the Thai border. The number of shrimp farming operations has rapidly increased since the middle of 1991. Most shrimp farms are located in the intertidal mangrove forest near the seaside and the stream bank of estuarine waters. Now, there are about 1,000 hectares of shrimp farms in the Koh Kong province.

The activities of shrimp farms cause much harm to the marine ecosystem, such as the destruction of mangrove forests. Moreover the waste from shrimp farms are being discharged directly into the sea without passing through a treatment process. The main impacts are on water quality and biodiversity in the marine zone. In order to prevent the marine pollution caused by shrimp farming, the Ministry of Environment recently adopted an order prohibiting the construction of new shrimp farms.

2.5 OFFSHORE EXPLORATION

Cambodia's portion of the Gulf of Thailand is divided into ten petroleum blocks. Contracts have already been granted permitting companies to conduct offshore exploration for gas and oil. There is concern that accidents could occur that would have serious negative effects on marine and shoreline plant and animal life. Thus the government of Cambodia has included in the contracts with exploitation companies a clause stating that waste must not be disposed into the sea. The companies

have demanded that Cambodia provide environmental inspectors to evaluate, monitor and control environmental problems. Unfortunately, the country currently lacks local experts in the field of environmental assessment.

Despite the lack of a legal regime of liabilities for marine pollution damages, the Ministry of Environment has strongly recommended that all contracts made between the Royal Government of Cambodia and oil and gas exploration companies include a provision that such companies will be responsible for bearing the cost of cleanup of any spills resulting from their activities.

With regard to maritime activities in the port of Sihanoukville, rules governing foreign ships already exist (Sub-decree No. 11, March 5, 1983, on Harbour Rules for Foreign Ships). Article 13 of this sub-decree defines hygiene measures for foreign ships that moor at Cambodia's ports and states that the discharge of sewage or used oil and dumping of any waste into the water or on the dock are prohibited.

To release waste or to discharge sewage or oil, the vessel owner shall ask the navigation office to arrange for disposal of the wastes and the owner shall bear the cost of such measures.

Ministry of Environment has issued a regulation on solid and liquid industrial waste management (Prakas No. 992, May 23, 1994) that prohibits the discharge of liquid industrial waste and sewage into the sea, rivers or lakes.

3.0 THE COUNTRY NEEDS CAPACITY-BUILDING FOR LEGISLATION

Due to its recent history, Cambodia lacks the human resource capacity to develop environmental legislation. The Ministry of Environment needs the cooperation and assistance of international agencies. At present, UNDP's Environmental Technical Advisory Project is assisting the Ministry of Environment develop additional policies and legal instruments that may be needed to implement the National Environmental Protection Law after its enactment by the national assembly.

ANNEX 7-B

MARINE POLLUTION LEGISLATION AND IMPLEMENTATION IN JAPAN

Nobuo Kumamoto, Ll.D.

1. Legislation in Japan relating to the UN Convention on the Law of the Sea include, amongst others:

   (a) the Amendment of the Law of Territorial Waters;
   (b) the Law concerning the Exclusive Economic Zone and the Continental Shelf;
   (c) the Law concerning the Exercise of Sovereignty over Fishing within the Exclusive Economic Zone;
   (d) the Law concerning Management and Preservation of Living Ocean Resources; and
   (e) the Law for the Amendment of the Role of the Maritime Safety Agency.

2. Laws relating to the marine environment include:

   (a) the Water Pollution Control Law (Law No. 138, 1970);
   (b) the Law concerning Special Measures for the Conservation of the Sea ;
   (c) the Law concerning Special Measures for the Conservation of the Environment of the Seto Inland Sea (Law No. 110, 1973, amended 1976, 1978);
   (d) the Act on Disposal of Waste and Sewerage;
   (e) the Marine Pollution and Disaster Prevention Law (Law No. 136, 1970), preventing the discharge of oil, harmful liquid and any substances, waste materials from vessels and marine facilities; and
   (f) the Port Rule Act.

3. Liability for pollution-causing acts are governed by the following laws:

   (a) Tort liability under Art. 1, National Compensation Act (Law No. 125, 1947) & Arts. 709 & 719, Civil Code (Law No. 89, 1986);
   (b) Act concerning Criminal Punishment on Pollution Relating to the Health of the Citizen (Law No. 142, 1970);
   (c) Oil Pollution Compensation Law (Law No. 95, 1975); and
   (d) Fundamental Law concerning Countermeasures against Public Nuisance (Law No. 132, 1967).

4. As to marine pollution caused by the discharge of oil on the open sea, Japan ratified the International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties on 6 April 1971 (effective May 6, 1975), but not the Protocol of 1973.

5. As to marine pollution by ships, the International Convention for the Prevention of Pollution from Ships of 1973 became effective on November 2, 1983. Japan has also since ratified all three optional annexes.

6. As to marine pollution by wastes and other substances, the London Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter became effective on 14 November 1980.

7. Japan adopted legislation relating to the international treaties mentioned above in order to enforce them within its territory, such as the Law concerning the Prevention of Casualty on the Sea of 1970.

8. Before ratifying the international treaties mentioned above, Japan had already adopted several pieces of legislation relating to the prevention of marine pollution and other related problems, such as the Law of Special Measures for Preserving the Environment of the Seto Inland Sea of 1973, and other related ordinances, rules, orders from government agencies, and the Water Pollution Prevention Law of 1970.

ANNEX 7-C-1

MARINE POLLUTION LEGISLATION IN INDONESIA

Prof. Dr. Siti Sundari Rangkuti, S.H. and
Prof. Dr. Abdul Rasjid, S.H., Ll.M.

1.0 INTRODUCTION

Indonesia is a country which consists of about 70 percent of waters and approximately 13,000 islands; so it is called an archipelagic state. In accordance with the United Nations Convention on the Law of The Sea (UNCLOS) of 1982, Indonesia has national sovereignty over archipelagic waters and territorial sea and jurisdiction over economic zones and the continental shelf. This means that Indonesia is one of the beneficiaries of the UNCLOS, particularly after the deposit of the sixtieth instrument of ratification (in 1995) that made the convention enter into force in line with Article 308, UNCLOS 1982.

In the same year of the adoption of UNCLOS 1982, a strong legal base for the protection of the marine environment was provided for by the enactment of Act No. 4 of 1982 concerning Basic Provisions for the Management of the Living Environment, promulgated on March 11, 1982 (abbreviated as EMA 1982). The act encompasses all aspects of environment as an integrated effort in the utilization, supervision, control, restoration and development of the living environment, including marine protection. It is based upon the concept of sustainable development.

During the colonial period, the Indonesian territorial waters were regulated by the *Territoriale Zee en Maritieme Kringen Ordonnantie 1939* (State Gazette 1939 No. 442), which stated that the breadth of Indonesian territorial waters was three nautical miles measured from the baselines of Indonesian Islands. On December 13, 1957, Indonesia declared its new policy on its territorial sea through the *Djuanda Declaration*, followed by the enactment of Act No. 4 of 1960 concerning Indonesian Waters. The new Act extended the breadth of the Indonesian territorial sea from three to twelve nautical miles measured from the baselines. The baselines comprise the line joining the outer points of the outermost islands of the archipelago. The law on the territorial sea was later followed by the enactment of Act No. 1 of 1973 concerning the Indonesian Continental Shelf. This Act is now outdated and should be revised.

While preparing for the ratification of the UNCLOS 1982, Indonesia promulgated Act No. 5 of 1983 concerning its Exclusive Economic Zone. The Act was supplemented by Government Regulation No. 15 of 1984 concerning the Management of the Living National Resources within the Indonesian Exclusive Economic Zone. Without waiting for the UNCLOS 1982 to come into force, Indonesia promulgated the implementation of UNCLOS 1982 as a national law through the enactment of Act No. 17 of 1985 ratifying UNCLOS 1982; and ever since, Indonesia has had a solid legal ground for marine protection.

2.0 EXISTING NATIONAL LEGISLATION/REGULATIONS ON MARINE POLLUTION AND THEIR IMPLEMENTATION

2.1 MARINE POLLUTION BY MAJOR SOURCE

(1) *Land-based Sources of Pollution* -- According to the Montreal Guidelines for the Protection of the Marine Environment Against Pollution from Land-Based Sources of April 1985, the main sources of land-based pollution are domestic, human and animal wastes as well as industrial, toxic and hazardous wastes. EMA 1982 is based upon the concept of sustainable development. To supplement EMA on the matter of industrial effluent, as a source of marine pollution, Article 21 par. (1) of Act No. 5 of 1984 on Industry requires industrial enterprises to make efforts to maintain the balance and sustainability of natural resources in order to prevent damage and pollution resulting from their industrial activities.

In order to implement Article 207 of UNCLOS 1982, Indonesia has enacted several pieces of legislation on hazardous waste. Taking into account internationally agreed rules to prevent, reduce and control pollution on the marine environment, Indonesia enacted *Presidential Decree No. 61 of 1993* concerning the Ratification of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal. Further regulation of the Convention was implemented in Government Regulation No. 19 of 1994 concerning the Management of Hazardous and Toxic Substances Disposal, later amended by Government Regulation No. 12 of 1995. This Government Regulation established a permit system for the processing and transportation of hazardous substances.

However, the procedure on how to get a license as required by Article 21 par. (4) has not yet been established by related regulation.

(2) *Ocean Dumping* -- Pollution by dumping is prohibited by EMA 1982 and other government regulations. However, implementation and enforcement are complicated problems, because of Indonesia's nature as an archipelagic state with approximately 13,000 islands.

Indonesia has not yet ratified the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matters (London Convention, 29 December 1972).

Activities within the Indonesian exclusive economic zone are regulated by Article 5 of Act No. 5 of 1983. A permit from the Government of Indonesia is required for activities for the exploration and exploitation of natural resources, like a power plant from water or wind energy, within the Indonesian exclusive economic zone. Further, according to Article 8, par. (1) of the same Act, whosoever undertakes the activities within the Indonesian exclusive economic zone is required to take necessary steps in order to prevent, limit, control and abate marine pollution. Furthermore, in accordance with Article 8, par. (2), dumping in the Indonesian exclusive economic zone can only be done by a permit from the Indonesian Government. This stipulation is in line with Article 210, par. (5) of UNCLOS 1982.

(3) *Vessel-Source Pollution* -- In implementation of Article 211 of UNCLOS 1982, Indonesia ratified the International Convention for the Prevention of Pollution from Ships on December 2, 1973

(MARPOL 1973 and the Protocol of 1978 relating thereto) by Presidential Decree No. 48 of 1986. Regulations on the matter were provided in the Decision of the Minister of Communication No. :KM 86 of 1990 concerning the Prevention of Oil Pollution from Ships.

In the framework of controlling ocean dumping and much in line with Article 210 of UNCLOS 1982, Indonesia had earlier ratified the International Convention on Civil Liability for Oil Pollution Damage (CLC) by Presidential Decree No. 18 of 1978 and the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (Fund Convention) by Presidential Decree No. 19 of 1970. The Protocols of 1978 and 1984 related to both Conventions should also be ratified. Pollution from vessels as provided in Article 211 of UNCLOS 1982 is not frequent in Indonesia; most incidents are casualties. Certain steps on this matter have been taken by the competent authority by issuing laws and regulations for the prevention, reduction and control of pollution of the marine environment from vessels, such as Article 8, par. (a) of Act No. 1 of 1973 concerning the Indonesian Continental Shelf. Article 11 of the Act provides penalties such as imprisonment and fine to whosoever violates the stipulations of the Act.

(4) *Pollution from Sea-bed Activities* -- As far as we know, Indonesia has not yet ratified the Convention on Civil Liability for Oil Pollution Damage Resulting from Exploration for and Exploitation of Sea-bed Mineral Resources (London, 1976). The scope of the Convention, under Article 2, is pollution damage caused by: incidents occurring on installations and offshore installations under the jurisdiction of the coastal state and damage sustained by the coastal states caused by pollution to its environment. Legislation on this matter is inadequate and can be found in scattered articles of Acts on the marine environment. Law enforcement, however, is very weak.

2.2 LEGAL REGIME OF LIABILITIES FOR MARINE POLLUTION DAMAGES

According to Article 20, par. (1) of EMA, whosoever damages and/or pollutes the living environment is liable for payment of compensation to victims whose right to a good and healthy living environment have been violated. The usual procedure for indemnity is regulated by Article 1365 BW (Indonesian Civil Code) which provides "liability based on fault" or "tort liability" to prove pollution. Being aware of the constraints in implementing "fault liability" in environmental cases, Article 21 EMA indicates that: "In certain activities pertaining to specific kinds of resources, strict liability rests on those causing the damage and/or pollution, which shall be stipulated in relevant legislation." So, according to Article 21 of EMA, "strict liability" could be applied as long as it is specifically indicated in legislation.

Presidential Decree No. 18 of 1978 concerning the Ratification of CLC provides for "strict liability" in cases of marine pollution. In implementation of Article 21 of EMA, Article 11, par. (1) of Act No. 5 of 1983 establishes the legal base for strict liability for whosoever causes marine pollution within the Indonesian Exclusive Economic Zone. However, further regulation on ceiling as mentioned in Article 12 is legally not yet described.

2.3 REQUIREMENTS FOR EIA AND ACTUAL PRACTICE

Environmental Impact Assessment is basically stipulated in Article 16 of EMA. Further implementation of the Article can be found in Government Regulation No. 51 of 1993 concerning Environmental Impact Analysis. Government Regulation 51 of 1993 was augmented by a number

of Ministry of the Environment Decisions, i.e., Decisions of the State Minister of the Environment No. : KEP-10-15/MENLH/3/1994 concerning Guidelines for EIA.

Decision of the State Minister of the Environment No. 11/MENLH/3/1994 stipulates the kind of business or activities for which EIA is required. Among the activities listed that could have a significant impact to the environment related to marine pollution are as follows:

(a) Exploitation of oil/ natural gas
(b) Transmission of oil/natural gas
(c) Coastal reclamation
(d) Drilling of the sea-bed
(e) Establishment of a naval base
(f) Sea park
(g) Waste disposal installation facility
(h) Etc.

The actual practice of Government Regulation No. 51 of 1993 could not yet be evaluated in such a relatively short time. But it could be put forward that the procedure of EIA is not integrated in the licensing system procedure as part of getting input for granting a license.

2.4 REQUIREMENTS FOR THE USE OF MARKET-BASED INSTRUMENTS

The use of market-based instruments has not been required yet, although some pollution instruments have been regulated in certain environmental acts. Effluent discharge fees, user fees and other environmental charges are not yet implemented, although there is a legal basis for it in Article 10, par. (3c) of EMA.

Although not concretely formulated in the stipulations of EMA, it could be said that the *"polluter pays principle"* is also applied in Indonesian environmental legislation, including marine pollution control.

3.0 NATIONAL LEGISLATIVE/REGULATORY STRUCTURE AND PROCEDURES ON MARINE POLLUTION

3.1 DISTRIBUTION OF MANDATES AND OBLIGATIONS

While specific obligations assumed by a state-party under the international instruments related to the protection and preservation of the marine environment have been implemented in national legislation, the procedures for their implementation are very weak. The distribution of mandates is still a complicated matter and depends on the competent authority in environmental management which is spread over many departments and non-departmental institutions.

According to Article 18 of EMA, the management of the living environment on the national level shall be carried out in an integrated manner by means of an institutional mechanism headed by a Minister and established by legislation. At this time, environmental management is coordinated by the State

Minister of Environment, who has no concrete administrative competence. The real competence in environmental management still resides in the sectoral ministers who have the competence to issue environmental licenses. Marine pollution is within the competence of the Director General for Marine Communication, a part of the Ministry of Communication.

In order to strengthen the position of the State Minister of Environment, a Presidential Decree issued in 1990 (later amended in 1993) established an institution called the *Badan Pengendalian Dampak Lingkungan* (abbreviated as BAPEDAL), i.e. *Agency for Environmental Impact Control*; but this new agency is a non-departmental institution, also without concrete competence.

There is no single authority responsible for marine environmental management.

3.2 THE ROLE OF NON-GOVERNMENTAL ORGANIZATIONS (NGOs)

Activities of environmental NGOs in the field of marine environment do not have much influence. One of the leading NGOs in Indonesia is WALHI (i.e. Wahan Lingkungan Hidup Indonesia). In Indonesia, NGOs are more or less self-reliant community institutions which perform a supporting role in the management of the living environment, as mentioned in Article 19 of EMA. WALHI has opposed several government decisions that affect the environment, but their role in protecting the marine environment is not very strong.

3.3 REQUIREMENTS FOR PUBLIC PARTICIPATION

Article 6 par. (1) of EMA stipulates that "every person has the right and obligation to participate in the management of the living environment." Legally speaking, the Article means that public participation is considered essential in the decision-making process on activities that could have negative impact on the environment. However, Article 6 par. (2) of EMA, says: "The participation as stated in paragraph (1) of this Article shall be established by legislation".

4.0 IMPLEMENTATION OF INTERNATIONAL INSTRUMENTS

4.1 SPECIFIC INSTRUMENTS IMPLEMENTED

The system of enforcing existing instruments in Indonesia is not as effective as it should be. Practical means should be taken into consideration and implemented. Insufficient law enforcement would affect the implementation of Article 194, Chapter XII, of UNCLOS 1982 concerning measures to prevent, reduce and control pollution of the marine environment. Now that UNCLOS 1982 has entered into force, a new national mechanism to implement the convention should be established. It is necessary that implementing institutions should be given executive power in order to make them effective, not only as a coordinating agency.

4.2 EXTENT OF IMPLEMENTATION

Whether or not it is necessary to set up an implementation program to provide effective measures to deal with marine pollution must still be studied. The protection of marine environment is still very weak. The weaknesses of the measures for the protection of the marine environment should be

overcome by establishing an institution with sufficient competence and not only having a coordinating function.

4.3 REASON FOR NON-RATIFICATION OF NON-IMPLEMENTATION (IDENTIFICATION OF CONSTRAINTS)

The comprehensive UNCLOS 1982 establishes new regimes under the law of the sea -- such as exclusive economic zone, the Area and so forth -- and its governing body. The Convention adopted new notions governing activities on the sea such as "sovereign right" over the EEZ, "common heritage of mankind" governing the activities in the Area. UNCLOS 1982 also creates legal institutions such as the "Law of the Sea Tribunal" and provides for its procedures to facilitate dispute settlement as a choice besides the International Court of Justice which has been in existence for some time and Arbitration. The provisions of UNCLOS 1982 could be considered as a unified system governing many interests. The adoption of the "archipelagic state principle" in the Convention is beneficial for Indonesia. Some of the provisions of the Convention are still questionable and need to be clarified. However, UNCLOS 1982 has entered into force and each provision may be considered as part of a unified and comprehensive code which governs activities at sea either on the global or regional basis.

5.0 ASSESSMENT OF INDONESIA'S NEEDS IN CAPACITY BUILDING FOR LEGISLATION AND RATIFICATION OF INTERNATIONAL CONVENTION ON MARINE POLLUTION

Indonesia ratified UNCLOS 1982 on 31 December 1985 by Act Number 17 of 1985. Before the ratification of the Convention, a number of legislation and regulations had been enacted and certain international conventions had been ratified. However, there are certain conditions that affect the efforts to prevent marine pollution through legislation. Lack of facilities, human resources and skill can become factors that weaken law enforcement and further development of management of the marine environment. Ratifications of international conventions on marine pollution do not have much effect on marine protection, as further regulations and necessary steps and actions are slow in progress. Besides the conventions that have been ratified as mentioned above, the acts and conventions in force in Indonesia related to marine resources are as follows:

(a) Act No. 9 of 1985 concerning Fisheries and related Government Regulation No. 15 of 1990 concerning Fishery Activities

(b) Act No. 5 of 1990 concerning the Conservation of the Living Natural Resources and its Ecosystem.

(c) Presidential Decree No. 65 of 1980 concerning the Ratification of International Convention for the Safety of Life at Sea of 1974 (SOLAS 1974).

(d) Presidential Decree No. 50 of 1979 concerning the Ratification of Convention on the International Regulation for Preventing Collision at Sea of 1972 (COLREG 1972).

(e) Presidential Decree No. 43 of 1978 concerning the Ratification of the Convention on the Trade in Endangered Species of Wild Fauna and Flora, 3 March 1973 (CITES 1973).

(f) Presidential Decree No. 26 of 1986 concerning the Ratification of the ASEAN Agreement on the conservation of Nature and Natural Resources.

(g) Act No. 1 of 1991 concerning the Ratification of the "Treaty Between the Republic of Indonesia and Australia on the Zone of Cooperation in an Area Between the Indonesia Province of East Timor and Northern Australia.

There are still certain international conventions that need ratification, such as:

(a) Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matters (London Convention, 29 December 1972); and

(b) International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties.

It is in the interest of the Indonesian Archipelagic State that the problem of development and implementation of legislation and regulations on marine pollution should be overcome. After UNCLOS 1982 entered into force, better steps should be taken for further legal development. Scientific research and study regarding marine environment has been conducted by the Center for Archipelago, Law and Development Studies (Bandung), one of the outstanding institutions that have contributed a lot of efforts to the development of the Indonesian law of the sea.

INDONESIAN COUNTRY REPORT ON MARINE POLLUTION LEGISLATION

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1.0 INTRODUCTION

Indonesia is an archipelagic nation consisting of 17,508 islands and an 81,000-km coastline. These natural attributes cause the marine environment to be the focus of a great many day-to-day activities and place the marine environment in a very important role for Indonesia. An estimate states that 22 percent of Indonesia's population live in coastal areas. The dependency of Indonesian people on the marine environment is further illustrated by the fact that many sectoral activities such as mining, tourism, transportation, fishing and construction take place in marine and coastal areas. These activities invariably lead to conflicts of interest which in turn lead to the degradation and pollution to the marine environment.

In response to the various activities taking place within the marine environment, the Indonesian government has responded by developing a specific legal approach in its legislation. Generally, the nation's legislation and regulations, while aimed at the prevention, control and reduction of pollution in the marine environment, have followed a sectoral approach rather than the more appropriate integrated approach.

Having realized the weaknesses of the existing legislation and regulations, the Indonesian government has found it extremely difficult to review and subsequently revise all the existing regulations so that it may develop an integrated management strategy for controlling marine environment pollution. In addition to revising the legislation, the Indonesian government must also evaluate the role of existing institutions which are presently involved in formulating, implementing and enforcing the existing legislation on marine and coastal management.

2.0 LEGAL FRAMEWORK

The "sectoral" legislation which is directly related to controlling marine pollution in Indonesia include:

- Act No. 11/1967 on Mining
- Act No. 1/1973 on Indonesian Continental Shelf
- Act No. 5/1983 on Indonesian Exclusive Economic Zone
- Act No. 5/1984 on Industry
- Act No. 5/1985 on Fishery
- Act No. 24/1992 on Navigation

The "integrated" legislation which is directly related to controlling marine pollution in Indonesia include:

- Act No. 4/1982 on Basic Provisions for the Management of the Environment
- Act No. 17/1985 on the Principle of the Archipelagic Concept and Ratification of the United Nations Convention on the Law of the Sea
- Act No. 35/1990 on Natural Resources and Ecosystem Conservation
- Act No. 24/1992 on Spatial Planning

2.1 LAND-BASED POLLUTION

In Indonesia, the major pollution sources to the marine environment are from land-based sources which include sedimentation due to erosion from the deforestation of watershed areas and mining operations. Other types of contamination which lead to marine environmental degradation include:

- nutrient loading from urban domestic wastes and agriculture runoff;
- pesticide residues from agriculture and aquaculture practices;
- thermal pollution (heat) from industrial cooling plants and power generation; and
- industrial pollution.

Nutrients and Domestic Waste. Controlling nutrient loading from domestic sources can be achieved by proper waste management if such actions were implemented by both the government and private sector. However, these actions remain very expensive. The most serious problem of uncontrolled domestic waste entering the marine environment generally comes from densely populated coastal city areas such as Jakarta, Ujung Pandang, Surabaya, Semarang, Medan and Ambon. A rather successful approach to controlling domestic waste has been through the provision of incentives and disincentives. One popular program which has achieved considerable success has been to annually present a national award to the cleanest city. The main criterion for the winning city is the success with which it has managed its waste. In Indonesia, waste management is under the control and supervision of the regional government, which is responsible for the development of supporting regional regulations.

Nutrients through agricultural runoff has the improper use of fertilizers and pesticides as its source. The regulation related to agricultural runoff is addressed in Act No. 12/1992 on Horticulture System and covers the general rules for fertilizer and pesticide use. Specific and detailed regulations in controlling pesticide use are contained in Government Regulation No. 7/1973 concerning the Control, Distribution, Storage and Use of Pesticides. In addition are several implementing regulation at the ministerial decree level, namely:

- Ministry of Agriculture Decree No. 280/Kpts/Um/6/1973 concerning Registration and License Application Procedures for Pesticides
- Ministry of Agriculture Decree No. 429/Kpts/Um/9/1973 concerning Packaging and Labelling Conditions for Pesticides
- Ministry of Agriculture Decree No. 944/Kpts/TP.270/11/1984 concerning Limitations on Pesticide Registration.

Industrial Waste. Industrial pollution from land-based sources represents one of the most critical issues in the prevention, control and reduction of marine pollution. The implementation of appropriate regulations concerning industrial pollution is under the control of the Ministry of Industry and is expressed in Ministry of Industry Decree No. 20/M/SK/1/1986 concerning Control of Industrial Pollution to the Environment. In this decree, the meaning of control includes:

- prevention of industrial pollution at the point of planning, construction or operation of an industrial activity or facility. This includes site selection, determining the impact to the environment of the site selected, selection of the industrial technology to take place at the site, selection of the procurement, storage, processing, packaging and transportation systems of raw material or industrial products; and selection of technology for industrial waste treatment and the supervision system for monitoring the emissions and levels of industrial pollution; and

- mitigation of industrial pollution during both construction and operational phases including the promulgation and enactment of Waste Quality Standards for each industrial activity/type, studying the causes of pollution and producing mitigation guidelines on the handling of industrial wastes.

Riverine Pollution. In addition to controlling industrial and domestic waste pollution, there is a specific Indonesian program to address the pollution of river systems. This program which has achieved considerable success is called PROKASIH. Related to the PROKASIH Program is the establishment of water quality standards. These standards, however, have been very difficult to enforce due to technical and institutional constraints. Presently, the PROKASIH Program is only being implemented in important river systems which are heavily polluted. The responsibilities and liabilities under this program are based on a contract between the polluter (industry) and the government. In the agreement, it is stated that the polluter will reduce its pollution load within an agreed timeframe. If the polluter fails to comply with the terms of agreement, sanctions may be invoked and may include revocation of the operation license, payment of penalties, or incarceration.

2.2 SHIP-BORNE POLLUTION

Of the various ship-borne sources of pollution to the marine environment, it is primarily the discharge of oil and ocean dumping which have been the focus of attention by the Indonesian government. The Indonesian government is currently considering the ratification of Annex III and IV of the International Convention for the Prevention of Pollution from Ships (MARPOL). Meanwhile, the government has ratified several international conventions concerning oil pollution, namely:

- Presidential Decree No. 18/1978 concerning Ratification of the International Convention on Civil Liability for Oil Pollution Damage
- Presidential Decree No. 19/1978 on the Ratification of the Convention for the Establishment of an International Compensation Fund for Oil Pollution Damage
- Presidential Decree No. 46/1986 concerning Ratification of the International Convention for the Prevention of Pollution from Ships (MARPOL)
- Minister of Communication Decree No. 167/HM.207/Phb-86, on the International Certificate for the Prevention of Pollution by Oil and the International Certificate for Prevention of Pollution from Poisonous Liquid Material.

2.3 TOXIC AND HAZARDOUS WASTES

Toxic and hazardous substances which are related to either land- or ship-based activities are controlled by Government Regulation No. 19/1994. This regulation primarily concerns itself with the control

of toxic and hazardous wastes from the cradle to the grave. The control process begins with determining what specific wastes will be produced by a production process before actual production starts, followed by the production operation, distribution and, finally, the discharge process.

3.0 LEGAL REGIME OF LIABILITIES

The basic legal regime of liabilities has been addressed in Act No. 4/1982 on the Basic Provisions for the Management of the Environment (EMA). The basic provisions related to the regime are:

3.1 THE REPRESSIVE APPROACH

- *The right to a good and healthy environment.* Article 5, paragraphs (1) and (2) states that: every person has the right to a good and healthy environment and that every person has the obligation to maintain the environment and to prevent and abate environmental damage and pollution. This provision gives every person the standing for every activity which causes pollution to the environment. The right, the obligation and other prohibition provisions for environmental protection are armed with sanctions and compensation that range from civil compensation to incarceration.

- Article 20 states that the liability of the polluter is not only civil liability in favour of the victim, but also includes the obligation to restore the environment to its previous state. Its elucidation explains that the form and type of loss resulting from the damage and pollution will determine the extent of compensation. The investigation of the form, type, and extent of the loss is to be carried out by a team established by the government. This investigation includes ecological, medical, socio-cultural and other aspects as deemed necessary.

- *Polluter pays principle.* Article 20, paragraphs (1) and (3) provides that the cost of pollution shall be the burden of the polluter. This provision is the legal basis for the use of economic instruments in controlling pollution. These include pollution penalties, effluent discharge fees and user fees. These instruments are still very limited in their application, particularly as they apply to controlling pollution from industrial activities. In other cases however, economic instruments are becoming more popular in the environmental decision-making processes. For example, the feasibility of a project which will impact the environment can be decided by a cost-benefit analysis when economic instruments are applied.

- *Strict liability principle.* Article 21 concerns the principle of strict liability. Based on the elucidation of the EMA, the Government of Indonesia has adopted limited liability rather than absolute liability. The elucidation states that strict liability will be conferred selectively in cases to be determined by legislation, which can specify the type and category of the activities within the scope of the relevant provisions. Since the Indonesian Government has ratified the International Convention on Civil Liability for Oil Pollution Damage in 1978, the application of strict liability refers to the ratification.

3.2 THE PREVENTIVE APPROACH

- *Environmental quality standards.* Article 15 states that the protection of the environment shall be based on environmental quality standards established by legislation. The environmental

quality standards needed are for fresh water quality, effluent waste water, ambient air quality and marine water quality standards. The Minister of State for the Environment is now developing marine water quality standards (MWQS) based on the existing guidelines presented in Ministry of Environment Decree No. Kep-02/MNKLH/1/1988. This decree classifies marine and coastal waters with respect to their uses for biota conservation, biota cultivation, maritime tourism and recreation, and industry and mining. As in the case with freshwater quality standard, the MWQS are very difficult to enforce because of technical and institutional constraints.

- *Preventing and abating pollution.* In general, Article 17 regulates and determines the obligation of sectors while carrying out their activities to prevent and abate pollution to the environment while necessary mechanisms are still to be established by legislation. The article's elucidation states that within the framework of the abatement of negative impact, the government can assist economically weak groups, whose activities are considered to have damaged or polluted the environment. The abatement of environmental damage and pollution caused by activities outside the national territory is carried out through agreements between countries.

  In Act No. 5/1984 concerning Industry, Article 21 states that industrial enterprises have the obligation to carry out efforts in maintaining the balance and sustainability of natural resources and to prevent damage and pollution resulting from their industrial activities. Referring to the elucidation of Article 17 of EMA, the government has an obligation to mitigate the pollution from industrial activities of specific kinds of small industries which are economically weak.

- *Licensing system.* In the elucidation of the provisions in Article 7 of EMA, it is stated that one of the requirements for obtaining an operating license is that every person engaged in an enterprise is similarly required to carry out activities which contribute to the capacity of the environment to support continued development. To fulfill this requirement, the government should be responsible for providing guidance to the enterprise.

- *Public participation.* Every person has the right and obligation to participate in the management of the environment. This is provided in Article 6 (1) of EMA. The principle of participation is important because solving environmental problems is viewed as a common cause. Participation should be present in the planning, implementation, control and enforcement, and evaluation processes. Public participation can be carried out through non-governmental organization activities.

- *Enhancing environmental awareness.* EMA, in its Article 9, states that it is an obligation of the government to cultivate and develop public awareness with regard to its responsibility in the management of the environment. This may be achieved through information, guidance, education, and research programs in the field of environment. The elucidation states that, in addition to environmental education taught through formal settings (from kindergarten to institutions of higher learning), it may also be presented through non-formal programs.

- *Incentive and disincentive system.* The elucidation of Article 8 of EMA states that in managing the environment, the government may take certain measures in the field of taxation as an incentive to further improve the maintenance of the environment as well as create disincentives

for preventing and abating environmental damage and pollution. This provision is another justification for the government to develop economic instruments for controlling pollution. Included in the incentive and disincentive system is a reward program (Kalpataru Environmental Award) for persons who have been successful in preventing, controlling and/or reducing pollution.

3.3 THE PROACTIVE APPROACH

- *Spatial planning.* Act No. 24/1992 on spatial planning will have a profound effect on the environmental sector, including the marine environment. In order to implement this Act, Presidential Decree No. 75/1993 was issued creating a national Coordinating Agency for Spatial Planning. The Act requires formulation of national, provincial and district/municipality spatial use plans. Specifically, the national plan will cover a 25-year period and shall contain:
  - national designations for protected areas, cultivation areas, and special areas;
  - the norms and criteria of spatial utilization; and
  - guidelines for the control of spatial utilization.

- *Environmental impact assessment.* Article 16 in Government Regulation No. 29/1986 states that each development proposal which is likely to have a significant impact on the environment must conduct a comprehensive environmental impact assessment (EIA). The necessity for an EIA applies to all development projects in the country, both public and private. The process has been in full operation for the past five years. In response to some dissatisfaction with this provision, a new regulation (Government Regulation No.51/1993) was issued whose objective was to simplify the EIA process and consequently make it more effective.

The revision of the EIA regulation specifies three new types of EIA. These are:

- an EIA for integrated activities, for multi-sectoral or multi-departmental projects. The EIA process is primarily directed at eliminating inter-departmental conflicts of jurisdiction by appointing the Environmental Impact Agency to take over the mandatory assessments;

- an EIA for specific areas, particularly for industrial estates. An EIA could be done for an entire estate, thereby reducing the requirements for a separate EIA for each specific component proposed within the area;

- and an EIA for regions, which permits an EIA to be conducted on an entire region, as opposed to specific project-oriented EIAs as in the past. This arrangement provides a linkage to new spatial planning legislation and is hoped to encourage the use of EIA as a planning tool. The regulations with regard to regional EIAs is expected to be developed as a unit of separate legislation.

Based on Presidential Decree No. 23/1990, the Government of Indonesia has established the Environmental Impact Agency to fully implement, monitor, and enforce EIAs.

4.0 INSTITUTIONAL FRAMEWORK

The Indonesian government system recognizes the central and regional levels of government. These two levels have corresponding sectoral and functional institutions

4.1 THE NATIONAL/CENTRAL LEVEL

At national levels, institutions are either designated as a Ministry of State, Department or Agency. A Ministry of State's function is to formulate policies and strategies and to act in an advisory and monitoring capacity with respect to development programs. Departments are sectoral ministries with responsibilities for policy development, and project development and implementation. While functioning with powers similar to those of departments, but with power determined by the President, agencies operate within a specific mandate.

Central government groups which are involved in the management of the marine and coastal environment include the State Ministry of Environment, the Environmental Impact Agency, the State Ministry of National Development Planning, the National Planning Agency, the State Ministry for Mobilization of Investment Capital, the Investment Coordinating Agency, the State Ministry of Agrarian, the National Land Administration Agency, the Ministry of Home Affairs, the Ministry of Defense, the Ministry of Forestry, the Ministry of Agriculture, the Ministry of Industry, the Ministry of Public Works, the Ministry of Mines and Energy, and the National Coordinating Agency for Survey and Mapping.

As stipulated in the EMA, there is clearly an important role to be played by the private sector in the formulation, implementation and enforcement of the nation's environmental legislation including those which are focused on the marine and coastal environments. Private sector representation can be drawn from the Indonesian Chamber of Commerce (KADIN), the Indonesian Travel Association (ASITA), the hotel association (PHRI), the construction association (INKINDO), as well as private companies which work in the field of environmental auditing.

As previously mentioned under the legal regime section, there is an obligation for NGOs to participate in the formulation, implementation and enforcement of environmental legislation.

4.2 REGIONAL LEVEL

Regional government structure and function was established by Act No. 5/1974 on Basic Provision for Governance in the Region. The regional government and associated agencies are divided into the provincial level (Regional level) and *Kabupaten* (district/regional level II) organizations. The provinces are headed by a Governor and district/municipality headed by a *Bupati*/Mayor.

The relevant regional institutions involved in marine environmental affairs are:

- Bappeda, the regional development Planning Agency, which is responsible for coordinating regional development plans, including those which relate to the marine environment, of the various sector agencies.

- BKMD (Regional Investment Coordinating Agency), which coordinates major investment projects in each region.
- BLH (Environmental Bureau), which is responsible for the implementation and administration of national environmental policy at the regional level.
- PSL (Environmental Study Centers), which are research and education units affiliated with a university.
- Dinas (Regional Sectoral Offices), which are responsible for formulating technical policy and providing advice on the technical improvement of sectors.

Both the national and regional level institutions formulate, implement and enforce environmental policy. The distinction between the two levels is that at the central/national level, more concern is directed to strategic issues while at the regional level greater emphasis is directed to technical issues.

Details of the relationship between the national and regional level governments and their functions as they relate to marine and coastal environmental management are shown.

5.0 IMPLEMENTATION IN INTERNATIONAL CONTEXT

With respect to pollution in the marine environment, solutions to this common problem must be done in a global and regional framework. To this end, the Indonesian Government has been involved at regional and international levels in efforts to prevent, control and reduce marine pollution.

5.1 RATIFIED CONVENTIONS

The Indonesian Government has ratified and become a party of many international conventions. Those which relate to marine pollution and environmental issues include:

- International Convention for the Safety of Life at Sea (SOLAS), 1960, ratified in 1966;
- International Agreement for the Facilitation of Search Ships in Distress and Rescue of Survivors of Ship Accidents, ratified in 1976;
- International Convention on Civil Liability for Oil Pollution Damage, 1969, ratified in 1978;
- International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1971, ratified in 1978;
- Convention on the International Regulation for Preventing Collisions at Sea (COLREG) ratified in 1978;
- International Convention for the Safety of Life at Sea (SOLAS), 1974, ratified in 1989; and
- International Convention on Load Lines (LL), 1966, ratified in 1976.

5.2 MEMBER OF IMO

Indonesia is a member of the International Maritime Organization (IMO) and has worked with IMO to develop measures to control marine pollution from vessel traffic, including oil tankers in transit through Indonesian and regional waters. IMO has pressed for action from the governments of Indonesia, Malaysia, Singapore and Thailand to improve safety in navigation in the Straits of Malacca

and Singapore. This call for action followed a series of shipping accidents and spills, the most notable being the *Showa Maru* incident in 1975.

Indonesia is implementing the IMO Convention on Oil Pollution Preparedness and Response by initiating the development of contingency plans pursuant to its obligations under the agreement. The implementation of (oil spill) contingency plans has been included as a part of the nation's Second Long-term Development Plan. Part of the planning will cover the improvement in the compliance of marine regulations and collecting contributions to marine transit arrangements and related infrastructure.

5.3 UN CONFERENCE ON ENVIRONMENT AND DEVELOPMENT

Indonesia is one of the signatories of the UN Conference on Environment and Development (UNCED). This conference has resulted in significant policy and legal developments which apply directly to the management of coastal resources in Indonesia.

Two prominent points in Agenda 21 which call for protection of the marine environment have important implications for Indonesian policy. These two points are:

- Chapter 17 which calls for the protection of the marine environment. The major issues addressed in this chapter are integrated management and sustainable development of coastal and marine areas. The Indonesian Government has received a grant from the ADB for Coastal Environmental Management Planning. In this project, the concept of integrated coastal zone management has been prominently featured.

- *Public participation.* Chapter 27 mentions that non-governmental organizations can play a vital role in the implementation of participatory democracy. Formal and informal organizations, as well as grass roots movements, should be recognized as partners in the implementation of Agenda 21. In the national context, coastal communities are generally considered to be among the poorest in Indonesia. Clearly, there is an important role for NGOs to represent those groups or communities which are presently unable to publicly voice their concerns with regards to development in their environment.

5.4 REGIONAL COOPERATION

Indonesia is also involved in several regional and international cooperation arrangements to protect the marine environment in the ASEAN region, These types of cooperative arrangements have led to the formation of various bodies such as COST, ASOEN, CCOP, ASCOPE, WESPAC, and COBSEA. Indonesia's participation in these bodies clearly indicate this country's serious intention to work together with other coastal states in the ASEAN and Pacific region to protect the marine environment.

With respect to the Straits of Malacca, regional cooperation between Indonesia, Singapore and Malaysia has led to the international adoption of the Traffic Separation Scheme (1977) and other rules for passage through the straits. This successful cooperation will hopefully decrease the potential for major spills due to collisions and groundings involving tankers.

5.5 BILATERAL COOPERATION

Indonesia has cooperated in numerous bilateral arrangements between Australia, America, Canada, Japan and the Netherlands in the field of marine and coastal environmental management. These programs have specifically contributed to the development of a national oil spill contingency plan, institutional strengthening of organizations responsible for marine and coastal affairs, the development of human resources, integrated coastal management and the compliance and enforcement of environmental law.

MARINE POLLUTION LEGISLATION IN THE REPUBLIC OF KOREA

Moon-Sang Kwon, Ph.D.

1.0 INTRODUCTION

During the last two decades, the Korean gross national product (GNP) grew more than 8 percent annually. During this period, the share of GNP devoted to pollution control rose remarkably from about 0.004 percent in 1972 to 0.23 percent in 1992. The economy-oriented authority of Korea has made slow and incremental efforts in establishing environmental policy, responding to diverse interests both within and outside of the nation.

It was not until the late 1970s that the Korean government recognized the health of a nation's economy depends, to an overwhelming extent, on its relationship to its environment. As an initial step towards rudimentary environmental policy, the Korean government took a series of actions including the enactment of the Environment Preservation Act of 1977 and the Marine Pollution Prevention Act of 1977 (wholly amended in March 8, 1991, Law No. 4365). To effectively implement and coordinate national environmental policies, the Korean government established the Environment Administration, as a subcabinet agency of the Ministry of Public Health and Social Affairs in 1980. Though the status of the Environment Administration was not sufficient to implement its function, the existence of a new governmental agency to enforce the environmental statutes was in itself meaningful.

From around 1990 just passing over US $5,000 per capita GNP, public consensus was built on that the existing institutional arrangements were not effective to deal with environmental problems emerging at various dimensions. In response, the government established 'the Ministry of Environment' in 1990, being elevated to a cabinet-level status.

There are a number of laws concerning marine pollution control. 'The Water Environment Preservation Act (Aug. 1, 1990, Law No. 4260)' is the major regulatory statute for controlling the land-based sources of pollution. It provides the legal instruments to control the cumulative impact of marine pollution by restricting the total input of pollutants in a certain body of coastal water. Relevant legislations concerning land-based marine pollution include the Sewage, Sludge and Animal Wastewater Treatment Act (Mar. 8, 1991, Law No. 4364) and Waste Management Act (Mar. 8, 1991, Law No. 4363).

The Marine Pollution Prevention Act regulates marine pollution arising from vessel-activities, ocean dumping, and other offshore activities, including sea-bed activities.

The Environmental Impact Assessment Act (Dec. 31, 1993, Law No. 4493) requires the Ministry of Environment to review the Environmental Impact Statement provided by coastal developers.

The Environmental Policy Act (Aug. 1, 1990, Law No. 4257) provides the legal background for the Ministry of Environment to set national environmental policy and establish long-term environmental management plan.

is permitted if they are discharged following the requirements of the ministerial decree. Third, discharge of wastes is allowed when it has been permitted by the Land Reclamation of Publicly-Owned Waters Act. Fourth, discharge of wastes whose onland disposal is difficult is permitted if it was discharged following the requirements of the ministerial decree. The fourth category of discharge refers to actual dumping of wastes and will be discussed later.

(3) Regulation of Ocean Dumping

Korea joined the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matters of 1972 (The London Dumping Convention) in 1994. In 1972, even the phrase, ocean dumping, was rarely heard in Korea. However, with the rapid industrialization, especially with the tremendous growth of chemical and heavy industries since the mid-1970's, the need for safe disposal of industrial wastes has begun to draw public attention. The government responded with regulations defined in the Marine Pollution Prevention Act of 1977. However, the regulations under this Act are different from the current international regulation as defined in the London Dumping Convention.

According to the Marine Pollution Prevention Act, dumping of industrial wastes into the sea can be done only by following the guidelines promulgated by the ministerial decree (Art. 16(4)). The government may designate the dump site for the discharger by ministerial decree (Art. 16(4)).

(4) Regulation of Marine Pollution from Offshore Facilities

Since the late 1960's, the continental shelf of the East China Sea has been a controversial issue among the neighboring nations. Because of the unique geographical conditions and political situation, a Korea-China-Japan agreement for delimitation has been impossible and seems improbable in the foreseeable future. As for Korea and Japan, two treaties were signed in 1974 regarding exploratory drilling, but, until now, they have has not been successful in the search for oil reserves.

The Submarine Mineral Resources Development Act of 1970, as amended in 1977, regulates the mineral leasing rights to offshore oil and gas resources. Article 29 of the Act requires that the operators adopt reasonable measures to prevent damage from the mining operations. More detailed environmental regulations are provided in the Marine Pollution Prevention Act.

Under the Marine Pollution Prevention Act, the discharge of oil, oily mixture, noxious materials and wastes from offshore facilities is prohibited unless discharged according to the regulations of the ministerial decree (Art. 34). Under the decree, those materials may be discharged according to the standards which are almost the same as those for discharge from ships. Due to minimal offshore activities compared to other maritime activities in the coastal seas of Korea, these regulations do not have a significant impact on efforts in environmental protection.

3.0 National Governance Structure for Marine Pollution Control

The governance structure of Korea centers around the President. The President is elected by popular vote and executive powers belong to him. The President nominates the Prime Minister, Ministers, and other executive officers. He presides over cabinet meetings which consist of the President, the prime minister and other ministerial level executive officials. Though many agencies have authority over

and responsibilities for environmental protection, the prime and coordinating responsibility for environmental management belongs to the Ministry of Environment.

One of the most difficult problems arising within the system of marine pollution control is the fragmentation of administrative authorities into several separate agencies which cooperate, as of yet, only in a limited fashion. The Ministry of Environment has authority to establish the Comprehensive Marine Environmental Preservation Plan, to establish the water quality standards of the sea waters and to operate the coastal water quality monitoring system. This means that the Ministry of Environment has authority to oversee planning, coordination and monitoring. On the other hand, the Marine Police Administration of the Ministry of Home Affairs holds enforcement power to undertake surveillance of polluting activities and oil spill cleanup. The Maritime and Port Administration is in charge of marine pollution prevention of vessel-originated sources. The Fisheries Administration is in charge of the monitoring of water quality in the Fishery Resources Preservation Zone. Such fragmentation of authority leads to inefficiencies in controlling marine pollution problems.

Though such fragmentation of authorities in marine pollution control is inevitable, the coordination of such separate policy-making is absolutely necessary to remedy the inefficiencies rendered by fragmentation. The coordinating function of the Ministry of Environment, though enhanced through the reorganization of the former Environment Administration, should be more expanded.

Following are the summary of the responsibilities and authorities of relevant agencies in environmental management with particular reference to marine pollution control:

(a) The Ministry of Environment

Under the Governmental Organization Act, the Ministry of Environment has prime responsibility for the administration of environmental protection. Another important authority of the Ministry is the coordination of other ministries' regulatory functions which may have an adverse environmental impact. If problems that should be solved through inter-ministerial consultation arise, the Environment Preservation Committee, chaired by the Prime Minister, has the final coordinative power.

(b) The Ministry of Foreign Affairs

The Ministry of Foreign Affairs has the responsibility for international cooperation through treaties and conventions. The environmental issues are now one of the major concerns in international diplomacy. The Ministry recently established the Science and Environment Office to respond actively to the new international environmental order, such as the UNCED of 1992.

(c) The Ministry of Home Affairs

The Marine Police Administration of the Ministry of Home Affairs has general authority for the enforcement of the Marine Pollution Prevention Act. The Administration operates an oil pollution prevention program. The Ministry of Home Affairs also serves the Central Committee for Nature Protection, a nationwide citizens' movement which performs an educational role for the protection of nature.

(d) The Ministry of Agriculture, Forestry, and Fishery

The Ministry has responsibility for regulating the use of pesticides in agriculture. The Fisheries Administration make efforts for marine pollution prevention especially to protect fisheries resources. It has recently become more concerned with the impact of overfishing on marine ecosystem.

(e) The Ministry of Construction and Transportation

The Ministry is responsible for the management of the nation's publicly-owned waters, including coastal and territorial seas. Most of coastal water reclamation and infilling operations, which have altered the marine habitat substantially, have been executed under the supervision of the Ministry. The Maritime and Port Administration is in charge of marine pollution prevention programs at port and harbors.

4.0 PUBLIC AWARENESS AND PARTICIPATION

4.1 PUBLIC AWARENESS FOR NATURE CONSERVATION AND ENVIRONMENTAL PROTECTION

Public awareness is essential for the improvement and maintenance of environmental quality. Without public involvement in environmental issues and disputes, government programs could not be successfully implemented. The basic policy on public awareness of the Korean government is to help establish ethical base related to nature conservation and environmental protection. In order to realize this goal, the government provides a variety of programmes and activities.

The effort to increase public awareness of the value of nature began in the mid-1970s as a semi-governmental movement. In 1978, the government instituted the *Charter for Nature Conservation*, and embarked on promoting the development of a nationwide nature conservation movement. Programs conducted under the movement include ecological research, expeditions and trips, symposia and seminars, publication of booklets, and waste-cleaning activities in national parks. It is noteworthy that these movements, which were made before the creation of the Ministry of Environment, have been conducted under the supervision of the Ministry of Home Affairs and the local governments. Although such efforts have not been developed into a systematic environmental protection movement, its contribution was significant.

It was after the mid-1980s that non-government organizations became involved in the environmental awareness movement. Public awareness programs conducted by various organizations include the following: First, the government has been providing information on environmental protection through direct campaigns, mass media, and by other means such as publication of booklets and the distribution of pamphlets. The Ministry of Environment disseminates important facts and governmental policies in cooperation with news media. The Ministry also provides information and materials on current environmental affairs to the news media. News media coverage on environmental problems has dramatically increased recently. This, in turn, can increase public awareness. In 1991, the Ministry of Environment distributed booklets containing environmental protection guidelines to business communities and civil leaders.

Second, the news media is now devoting itself to environmental protection issues. Television and radio networks owned by public corporations or by private broadcasters run public interest advertisements. As they are run on prime time, their impact is highly significant. Newspapers also contribute to environmental protection by in-depth reporting. Major newspapers produce special reports on environmental issues at least once a week. Several newspapers even run a series of reports on some specific topics such as the coastal ecosystem degradation and the crisis in solid waste management.

Third, the business communities are now conducting their own environmental awareness programs. Some of them are paying for the public environmental protection advertisements in the news media. Besides, many businesses are conducting campaigns inside their own organizations to promote a clean environment. Some of them sponsor symposia on environmental science and technology.

Finally, many private non-government organizations have been involved in the various awareness programs. The consumers' movement, the women's movement, and the environmental activist groups recently organized also contribute significantly to public awareness of environmental protection.

4.2 PUBLIC PARTICIPATION

Public participation is an important factor in any contemporary democracy. There are two important aspects -- public participation in the decision-making process and the public's access to information in the hands of government.

There have been a number of institutional reforms in recent years to promote public participation in Korea. For example, the environmental impact assessment process under the Environmental Impact Assessment Act now requires public hearing in certain cases before final statements are prepared.

The Korean people now have more opportunities to participate in environmental decision-making, at least at the level of local government. This is due to the fact that the autonomy of local governments was reinstated in 1991. The autonomy of local government has been limited since 1961. Therefore, the Korean people are now able to closely look at their local government's decisions which affect the quality of their neighborhood environment. However, a short-term negative result is the rise of selfish local governments, which prevent a holistic consideration of issues. Many non-governmental organizations play important roles in the promotion of environmental awareness, education, and public participation. Though some of them are financially supported by the government, most of them are self-supporting private organizations.

These organizations' contributions are significant as their activities have awakened the general public's interest in the importance of environmental protection. Now, as the academic and business communities have also started to care more for the environment, their roles are expected to develop to a more systematic level.

5.0 IMPLEMENTATION OF INTERNATIONAL CONVENTIONS ON MARINE POLLUTION CONTROL

Numerous multilateral environmental treaties have been introduced during the past 20 years. In the past, Korea was slow to participate in such treaties because of its poor economic situation. Now, as a member of the global society, Korea is participating in major international environmental treaties and is also planning to implement more of such treaties as soon as its domestic enforcement mechanisms are in place. Korea recently ratified the 1982 UN Convention on the Law of the Sea., acceded to MARPOL 73/78 and its Annexes I and II in 1984 and incorporated most Annex III and V obligations into the national legislation -- the Marine Pollution Prevention Act which was amended last December 1995. Korea also became a state party of the 1972 London Dumping Convention in 1994. In relation to the Convention on oil pollution damage compensation, Korea acceded to the 1969 Civil Liability Convention and the 1971 Fund Convention in 1979 and 1993, respectively, and enacted the 1992 Oil Pollution Damage Compensation Security Act to implement the above two conventions.

Furthermore, the Korean Government has been carrying out preparatory works to accede to the 1990 International Convention on Oil Pollution Preparedness, Response and Cooperation in 1998.

6.0 CONCLUSION

Korea has established, in the past three decades, a relatively well-structured legal foundation for controlling marine pollution originated from land and marine activities.

There is, however, a lot of concern with the implementation of such legislations. Successful implementation requires strong support from both governmental and public sectors, in terms of management resources, technical capacity and eventually the change of human behaviour.

In this regard, I would like to suggest that this Workshop should be able to identify an effective mechanism to facilitate the implementation of existing institutional arrangements and to enhance more active participation of both government and public sectors.

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A BRIEF OVERVIEW OF THE LEGAL REGIME CONCERNING MARINE POLLUTION IN MALAYSIA

Suryna Ali

1.0 INTRODUCTION

With a long coastline of 8,400 km, and major settlements and development activities concentrated along the coastal plain, marine pollution is a significant problem affecting Malaysia's environment today. This paper attempts to provide a brief outline of the legal regime concerning the problem of marine pollution.

Sources of marine pollution are land-based and sea-based. However, land-based activities are the major source of pollutants to the marine environment. It has been estimated that land-based activities contribute about 70 percent of all pollution in the oceans. Other sources are from offshore activities such as from the discharge of vessels, oil and gas exploration or offshore mining of minerals. The damage caused by land-based pollution to the marine environment includes loss of habitats and disruption of ecological cycles.

Historically, the laws related to environmental issues were largely a legacy of the colonial government and reflected an emphasis on the protection of economic resources only. Hence the laws were largely sectional in nature and were not effective in addressing environmental pollution which requires a more extensive and integrated approach. This gave birth to the Environmental Quality Act 1974 (hereinafter referred to as the EQA 1974). Today, environmental management of pollution in Malaysia is premised on this Act. The preamble of the Act reads:

> "an Act relating to the prevention, abatement, control of pollution and enhancement of the environment, and for purposes connected therewith."

Generally, there are few provisions enumerated in the EQA 1974 which pertain to the marine environment. They are sections 21, 25, 27 and 29. In addition to this, Section 51 of the EQA 1974 further allows the Ministry of Science, Technology and Environment, after consultation with the Environmental Quality Council (EQC), to make regulations aimed at environmental protection. See 51(d), (f), (k), (p), (q).

Besides the EQA 1974, there are various provisions scattered in other laws which are enforced by other ministries such as the Local Government Act 1976 and Sewerage Services Act 1993. (This list is not exhaustive).

2.0 LAWS RELEVANT TO LAND-BASED POLLUTION

In general, the management of environmental issues in Malaysia, including issues relating to marine pollution, involves the use of both regulatory and market-based approaches.

The principal law governing land-based pollution is the EQA 1974 and the regulations made thereunder. Besides this, other statutory provisions are also applicable.

The following laws are relevant and applicable to specific areas and activities:

2.1 CONTROL OF AGRO-BASED WATER POLLUTION

(a) Environmental Quality (Licensing) Regulations 1977

(b) Environmental Quality (Prescribed Premises) (Crude Palm Oil) Regulations 1977

(c) Environmental Quality (Prescribed Premises) (Raw Natural Rubber) Regulations

2.2 CONTROL OF MUNICIPAL AND INDUSTRIAL WASTEPAPER POLLUTION

(d) Environmental Quality (Sewage and Industrial Effluent) Regulations 1979

2.3 INTEGRATION OF ENVIRONMENT AND DEVELOPMENT

(e) Environmental Quality (Prescribed Activities -- Environmental Impact Assessment) Order 1987

2.4 CONTROL OF TOXIC AND HAZARDOUS WASTE

(f) Environmental Quality (Scheduled Wastes) Regulations 1989

(g) Environmental Quality (Prescribed Premises) Scheduled Wastes Treatment and Disposal Facilities Order 1989 (P.U. (A) 140)

(h) Environmental Quality (Prescribed Premises -- Scheduled Wastes Treatment and Disposal Facilities) Regulations 1989 (P.U. (A) 141)

2.5 AIR POLLUTION CONTROL MANAGEMENT

(i) Motor Vehicle (Control of Smoke and Gas Emissions) Rules 1977 (made under the Road Traffic Ordinance 1958)

(j) Environmental Quality (Clean Air) Regulations 1978

(k) Environmental Quality (Control of Lead Concentration in Motor Gasoline) Regulations 1985

(l) Environmental Quality (Motor Vehicle Noise) Regulation 1987

2.6 TRANSBOUNDARY MOVEMENT OF HAZARDOUS WASTE

(m) Environmental Quality (Scheduled Wastes) Regulations 1989

(n) Under the Customs Act 1967 -- The Customs (Prohibition of Exports) Amendment) (No. 2) Order 1993 and the Customs (Prohibition of Exports) (Amendment) (No. 3) Order 1993

3.0 LAWS RELEVANT TO SEA-BASED POLLUTION

The issue of sea-based pollution falls under the ambit of the following laws:

3.1 VESSEL SOURCE POLLUTION

(a) Merchant Shipping Ordinance 1952-Part VA

(b) Merchant Shipping (Oil Pollution) Act 1994 came into force on the 6th of April 1995 (PU. (B) 144/95) seeking to make the shipowner liable for pollution caused by his vessel and requiring mandatory insurance for ships carrying more than 2,000 tonnes of oil, and fixing the limit for liability.

(c) Environmental Quality Act 1974

(d) Exclusive Economic Zone Act 1984

3.2 OFFSHORE ACTIVITIES

(e) Continental Shelf Act 1966 (Revised 1972)

(f) Petroleum Mining Act 1966

(g) Petroleum Development Act 1974

(h) Petroleum (Safety Measures) Act 1984

(i) Exclusive Economic Zone Act 1984

These laws, together, cover the whole maritime area of Malaysia.

4.0 LIABILITY REGIME FOR MARINE POLLUTION DAMAGES

The liability regime for marine pollution is spelt out in the separate laws. Initially, the regime was characterized by the imposition of fine, imprisonment, or both. This has since been broadened to include compensation and is reflected in the Merchant Shipping (Oil Pollution) Act 1994.

5.0 THE EIA REQUIREMENT

The objective of the EIA procedure in Malaysia is to act as a tool for environmental planning of new projects or to the expansion of existing development projects. While pollution control can be seen as part of a comprehensive approach to environmental management, management must also include pollution control and resource planning.

The preparation of an Environmental Impact Assessment (EIA) report is a legal requirement under Section 34A of the EQA 1974. It is a prerequisite in project planning for prescribed activities.

The Minister, after consulting the EQC, set up under Section 4 of the EQA 1974, may by order prescribe any activity which may have a significant environmental impact as a "prescribed activity". This is reflected in the Environmental Quality (Prescribed Activities) (Environmental Impact Assessment) Order 1987. At present, there are 19 general types of activities which are covered by this order. They are:

1. agricultural activities,
2. the construction of airports,
3. drainage and irrigation for the construction of dams and man-made lakes,
4. land reclamation, e.g., construction of fishing harbours,
6. forestry activities, e.g., conversation of hill forest land,
7. housing,
8. industry,
9. infrastructure,
10. ports, e.g., construction of ports and ports expansion,
11. mining, e.g., mining of materials or processing,
12. petroleum, e.g., oil and gas fields, construction of gas facilities,
13. power generation and transmission,
14. quarries,
15. railways,
16. transportation,
17. resort and recreational development,
18. waste treatment and disposal, e.g., toxic and hazardous waste, and
19. water supply.

These specific activities are further defined in terms of their size, quantity and acreage.

The EIA report should be submitted to the Director General of Environmental Quality whose powers, duties and functions are spelt out in Section 3 of the EQA 1974. For the preparation of the EIA report the proposer must comply with the guidelines prescribed by the Director General.

The contents of the EIA report should reflect an assessment of the impact such activity will have or is likely to have on the environment. Thereafter, appropriate measures should be incorporated for the prevention, reduction or control of the adverse impact on the environment.

The Director General will then approve the EIA report with or without conditions and shall inform the proposer and the relevant approving authorities of his decision.

If the EIA report is not approved, the Director General shall give his reasons and inform the proposer and the other relevant approving authorities. However the proposer is not prevented from revising and resubmitting the revised EIA report to the Director General. The prescribed activities shall not be carried out unless an EIA report has been submitted and approved by the Director General.

After the EIA report has been approved by the Director General the proposer shall provide sufficient proof of compliance with such measures in carrying out the prescribed activity.

Non-compliance with Section 34A is an offence and is punishable with fine (maximum-RM 1,000.00) or imprisonment (maximum-two years) or both. A further fine of RM 1,000.00 per day is imposed for any continued offence.

6.0 MARKET-BASED APPROACH

The market based approach towards alleviating environmental pollution has been introduced since the early 1970s. It has been implemented directly and indirectly for major polluting industries such as the agro-based industries (rubber and oil palm), mobile sources, and toxic and hazardous wastes generators.

This approach has been quite successful and a brief description is given below:

6.1 RUBBER AND OIL PALM INDUSTRIES

In the mid-1970s, many rivers in Malaysia were severely anaerobically (oxygen-depleted) polluted due to disposal of untreated effluent to the watercourse. This had a significant impact on the coastal resources, thus affecting the socio-economic conditions of the local people. The government acted by undertaking the following measures:

(1) *License Fee* -- Due to the lack of a proven technology to treat effluent from agro-based industries, different license conditions to minimize pollution were attached according to the factors spelt out in Section 17 (2) of the EQA 1974. The factors are the class of premises, the location of the premises, the quantity of waste discharged, the pollutant or class of pollutants discharged, and the existing level of pollution.

(2) *Phasing of Standards* -- The phasing of standards for Biological Oxygen Demand (BOD) over a period of four years gave the industry time to construct treatment facilities and to gain experience operating them in order to conform to the increasing standards set by the government.

(3) *Effluent -related Fee* -- The "polluter pays principle" was used to assess the amount of fee necessary to operate the premises. The amount of effluent related fee payable to the Government was linked to the BOD load in the effluent discharged either unto the land, watercourse, or both. The fee for discharge into the watercourse is RM1/tonne of BOD load discharged and RM0.05/tonne disposal onto the land.

(4) *Research and development* -- The Government provides a provision in the regulations authorizing it to grant a partial or full waiver of effluent-related license fees to industries conducting research on effluent treatment.

6.2 MOBILE SOURCES

Atmospheric lead -- Monitoring results for atmospheric lead showed that areas of heavy vehicular traffic recorded the highest lead concentration, followed by residential, industrial and commercial area.

The following measures have been taken by the Government to remedy the situation:

i. *Reduction of Lead in Gasoline* -- The level of 0.4g/1 for leaded gasoline has been reduced to the current maximum lead content of 0.15g/1 as of 1st January 1990.

ii. *Introduction of Unleaded Gas (ULG)* -- To further minimize the atmospheric lead concentration, the oil industry has introduced lead-free gasoline. The Government assisted the promotion of ULG by offering it at a reduced price at all service stations commencing from 1st January 1994.

6.3 BLACK SMOKE EMISSION

A survey for black smoke emissions from diesel powered vehicles conducted in 1994 showed that 7,392 out of 36,312 vehicles tested violated the permissible limit.

The Malaysian government applied a tax incentive to reduce black smoke emissions by giving a 50 percent tax reduction for lower emission new generation diesel vehicles.

6.4 TOXIC AND HAZARDOUS WASTES

To encourage an effective industrial waste management practice, the following incentives are currently available:

(a) Pioneer status for 5 years to companies which are principally engaged in an integrated operation for the storage, treatment and disposal of toxic and hazardous waste;

(b) Special capital allowance incentive to companies which set up their own facilities to treat their own wastes. This allowance is at an initial rate of 40 percent and an annual rate of 29 percent for 5 years on all capital expenditures incurred in waste treatment and disposal; and

(c) as a further incentive for both the above, the Government also extended the current import duty and sales tax exemption scheme for machinery, equipment, raw materials and components.

However, before the above incentives are granted, the facilities for storage, treatment and disposal of toxic and hazardous wastes must be approved by the Department of Environment

Besides the above mentioned, all investors are encouraged to give attention to certain aspects of pollution control at the early planning stage of their project. The areas are:

i. look into pollution control measures as early as possible, i.e., at the pre-feasibility study stage;

ii. find possible modifications in the process line that can minimize waste generation;

iii. view pollution prevention as part of the production; and

iv. consider recycling options as far as possible.

7.0 REGULATORY FRAMEWORK

The regulatory framework is premised on the Federal Constitution which has outlined the respective jurisdiction of federal and state authorities. The distribution of mandates to certain authorities is determined constitutionally.

The national legislation and international commitments pertaining to marine pollution is given in Appendix I. The relevant agencies involved in combating marine pollution is given in Appendix II.

There are other interested parties, such as an the non-governmental organizations (NGOs) and the general public who can positively contribute towards solving the problem of marine pollution. The role and contributions of NGOs and the general public are recognized by the Malaysian government and their views are often sought for at various levels. Public participation in project planning is legally provided for under Section 34A(2) of the EQA 1974. There are several components on public participation with respect to the prescribed activities in the guidelines issued by the Director General. The aims of public participation in project planning are:

(a) to identify the material or psychological impact of proposal;
(b) to measure and promote the social acceptance of a project;
(c) to monitor the community needs and ensure that the project would continue to satisfy those needs; and
(d) to monitor changing environmental values in the community.

8.0 CONCLUSION

Malaysia's attempt at combatting the scourge of marine pollution has to be seen from historical perspective. Over a period of 39 years, Malaysia's legal regime has evolved from one that is fragmented due largely to her colonial inheritance to a regime that is more integrated and reflecting a holistic approach towards addressing environmental issues. This is a healthy trend and reflects a legal climate that is dynamic and sensitive towards the changes that affect Malaysian society.

The views expressed here are the author's own views and do not reflect the official position of the Malaysian government.

MARINE POLLUTION LAWS IN MALAYSIA

Source: Juita Ramli, Maritime Institute of Malaysia (MIMA)

NATIONAL LEGISLATION	ADOPTED INTERNATIONAL CONVENTION	ACCESSION
1. Waters Act 1920	International Convention for the Prevention of Pollution from Ships 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78)	
2. Merchant Shipping Ordinance 1952; 1960		
3. Environmental Quality Act 1974 - Act 127		
4. Environmental Quality (Sewage and Industrial Effluent) Regulations 1979		
5. Environmental Quality (Prescribed Premises) (Crude Palm Oil) Regulations 1978		
6. Environmental Quality (Prescribed Premises) (Raw Natural Rubber) Regulations 1978		
7. Exclusive Economic Zone Act 1984 - Act 311	United Nations Convention on the Law of the Sea (LOSC 82)	
8. Environmental Quality (Prescribed Premises) (EIA) Order 1987		
9. Environmental Quality (Prescribed Premises) (Scheduled Wastes Treatment and Disposal Facilities) Regulations 1989		

NATIONAL LEGISLATION	ADOPTED INTERNATIONAL CONVENTION	ACCESSION
10. Environmental Quality (Scheduled Wastes) Regulations 1989	Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (Basel Convention 1989)	Date of signature: 8 October 1993 Date of entry into force: 12 August 1993
11. Customs (Prohibition of Export) (Amendment) No. 2 Order 1993	as above	as above
12. Customs (Prohibition of Export) (Amendment) No. 3 Order 1993	as above	as above
13. Housing Developers (Control and Licensing) Act 1966; Amendment 1988		
14. Housing Developers (Control and Licensing) Regulations 1989		
15. Uniform Building By-Laws 1988		
16. MS (Oil Pollution) Act 1994 - Act 515	o International Convention on Liability for Oil Pollution Damage 1969 (CLC 69) o International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage 1971 (FUND 71) o Memorandum of Understanding on Port State Control in Implementing Agreements on Maritime Safety and Protection of the Marine Environment 1982	o Date of deposit: 6 January 1995 Date of entry into force: 6 April 1995 o Date of deposit: 6 January 1995 Date of entry into force: 6 April 1995

NATIONAL LEGISLATION	ADOPTED INTERNATIONAL CONVENTION	ACCESSION
Merchant Shipping Ordinance 1952	Memorandum of Understanding on Port State Control in the Asia-Pacific Region 1993 (Tokyo MoU 1993) requires accession to the following conventions for implementation:	Date of signature: 1 December 1993 Date of deposit: 1 April 1994 Date of entry into force: 1 April 1994
	1) International Convention for the Safety of Life at Sea 1974, as modified by its Protocol of 1978 (SOLAS 1974)	Date of signature: Date of deposit: 19 October 1983 Date of entry into force: 19 January 1984
	2) International Convention on Load Lines 1966 (LOADLINES 1966)	Date of signature: Date of deposit: 12 January 1971 Date of entry into force: 12 April 1971
	3) International Convention on Standard of Training, Certification and Watchkeeping for Seafarers 1978 (STCW 1978)	Date of signature: Date of deposit: 24 April 1984 Date of entry into force: 30 July 1984
	4) International Convention on the International Regulations for Preventing Collisions at Sea (COLREG 1972)	Date of signature: Date of deposit: 23 December 1980 Date of entry into force: 23 Dec. 1980
	5) MARPOL 73/78	

Appendix 2

MARITIME AGENCIES IN MALAYSIA FOR COMBATTING MARINE POLLUTION -- DELEGATION OF POWERS PROVIDED UNDER:

- **THE ENVIRONMENTAL QUALITY ACT 1974**
- **THE EXCLUSIVE ECONOMIC ZONE ACT 1984**
- **THE MERCHANT SHIPPING ORDINANCE 1952**

1. DEPARTMENT OF ENVIRONMENT
2. MARINE DEPARTMENT
3. ROYAL MALAYSIAN CUSTOMS AND EXCISE DEPARTMENT
4. DEPARTMENT OF FISHERIES
5. ROYAL MALAYSIAN POLICE - MARINE BRANCH
6. ROYAL MALAYSIAN NAVY

Source: Juita Ramli, Maritime Institute of Malaysia (MIMA)

ANNEX 7-F

MARINE POLLUTION LEGISLATION AND IMPLEMENTATION: REPUBLIC OF SINGAPORE

Alan KJ Tan

1.0 Facts and Figures: Republic of Singapore

Land Area: 620 square kilometres, an island city-state republic
Population: Approx. 3 million; 100% urban

2.0 Ratification and Implementation of Relevant International Marine Pollution Conventions

2.1 International Convention for the Prevention of Pollution from Ships 1973 (MARPOL 73/78) - Annexes I, II and III.

Date of accession/ratification: 1 November 1990
Date Convention entered into force in Singapore: 1 February 1991 (2 June 1994 for Annex III)
Implementing legislation: Prevention of Pollution of the Sea Act

2.2 International Convention on Civil Liability for Oil Pollution Damage 1969

Date of accession/ratification: 16 September 1981
Date Convention entered into force in Singapore: 15 December 1981
Implementing legislation: Merchant Shipping (Oil Pollution) Act

2.3 United Nations Convention on the Law of the Sea 1982

Date of accession/ratification: 17 November 1994
Implementing legislation: Pending

2.4 International Convention for Safety of Life at Sea (SOLAS) 1974 - Chapter VII: Carriage of Dangerous Goods

Date of accession/ratification: 13 March 1981
Implementing legislation: Merchant Shipping (Safety Convention) Regulations

2.5 Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal

Date of accession/ratification: 2 January 1996
Implementing legislation: Pending

3.0 Statutes of the Republic of Singapore: National Legislation Relevant to Marine Pollution, with Subsidiary Legislation (Regulations) Promulgated Thereunder

3.1 **Prevention of Pollution of the Sea Act**, Chapter 243:

Prevention of Pollution of the Sea (Oil) Regulations
[giving effect to Annex I of MARPOL, except Regulation 12]

Prevention of Pollution of the Sea (Noxious Liquid Substance in Bulk) Regulations
[giving effect to Annex II of MARPOL, except Regulation 7]

Prevention of Pollution of the Sea (Reporting of Pollution Incidents) Regulations
[giving effect to Protocol 1 of MARPOL]

Prevention of Pollution of the Sea (Reception Facilities) Regulations
[giving effect to Regulations 12 and 7 of Annexes I and II respectively]

Prevention of Pollution of the Sea (Detergent and Equipment) Regulations
Prevention of Pollution of the Sea (Composition of Offences) Regulations

3.2 **Merchant Shipping (Oil Pollution) Act**, Chapter 180:

Merchant Shipping (Oil Pollution) (Compulsory Insurance Certificate) Regulations
Merchant Shipping (Safety Convention) Regulations

3.3 **Port of Singapore Authority Act**, Chapter 236:

Port of Singapore Authority (Dangerous Goods, Petroleum and Explosives) Regulations
Singapore Port Regulations

3.4 **Water Pollution Control and Drainage Act**, Chapter 348:

Sanitary Plumbing and Drainage Systems Regulations
Surface Water Drainage Regulations
Trade Effluent Regulations
Sewage Treatment Plants Regulations

3.5 **Petroleum Act**, Chapter 229:

Petroleum (Transport and Storage) Rules
Petroleum (Storage Licence Fees) Rules
Petroleum (Transport by Land - Fees) Rules

3.6 **Environmental Public Health Act**, Chapter 95:

Environmental Public Health (Toxic Industrial Waste) Regulations
Environmental Public Health (General Waste Collection) Regulations

4.0 Commentary

4.1 ELABORATION: NATIONAL LEGISLATION ON MARINE POLLUTION

(1) *Land-Based Marine Pollution*

There is at present no specific national legislation *directly* governing the issue of marine pollution from land-based sources. The only Act which contains specific provisions establishing a clear nexus between pollution from land and the marine environment is the Prevention of Pollution of the Sea Act (PPSA). Although the PPSA was primarily enacted to give effect to MARPOL 73/78, Part II of the PPSA, entitled *Prevention of Pollution from Land and Apparatus*, contains provisions which regulate marine pollution activities lying outside the ambit of MARPOL 73/78.

Specifically, Section 5 of Part II, provides that any person putting, throwing, casting or depositing into Singapore waters any oil, oily mixture, refuse, garbage, plastics, waste matter, carcase, noxious liquid substances, marine pollutant in packaged form or trade effluent, shall be guilty of a criminal offence and shall be liable on conviction to a fine not exceeding S$10,000 (US$7,100) or to imprisonment for a term not exceeding 2 years, or to both. "Singapore waters" is defined to include inland waters. Hence, deliberate polluting into rivers inland, as well as into Singapore territorial waters, will attract the penalties of Section 5.

Elsewhere, legislation like the Water Pollution Control and Drainage Act seek to regulate pollution of inland water sources, with emphasis on the proper treatment and disposal of sewage and trade effluents. (All wastewater in Singapore is collected and treated before discharge.) The Petroleum Act, as its name suggests, regulates the transport and storage of petroleum and seeks to prevent pollution from petroleum-refining activities. The Environmental Public Health Act contains provisions which regulate the dumping of industrial wastes and dangerous substances on land. Thus, to the extent that the wastes governed by the above Acts find their way into the marine environment, the legislation may be relevant if the source can be traced back to the initial improper disposal on land.

(2) *Vessel-source marine pollution*

With respect to vessel-source marine pollution, the comprehensive Regulations enacted under the Prevention of Pollution of the Sea Act (PPSA) implement MARPOL 73/78. Even though Singapore has acceded neither to Annexes IV and V of MARPOL (regulating the disposal of sewage and garbage respectively) nor to the 1972 London Dumping Convention (LC), Section 6 of the PPSA has effectively implemented the spirit of Annexes IV and V and the LC, by prohibiting the disposal or discharge from ships into Singapore waters of any refuse, garbage, waste matter, plastics, trade effluent or marine pollutant in packaged form. It is to be noted that Section 6 prohibits dumping from any vessel into Singapore waters only.

Section 7, which is the provision regulating the discharge of oil and oily mixtures (Annex I of MARPOL), imposes a fine of up to S$500,000 (US$350,000) each on the master, the owner and the agent of any Singapore vessel discharging oil or oily mixtures into any part of the sea worldwide, or of any non-Singapore vessel discharging the same into Singapore waters. The master, owner and agent can also be liable to imprisonment for up to 2 years each.

Section 10 of the PPSA gives effect to Annex II of MARPOL, with regard to the discharge of noxious liquid substances (NLS). Upon conviction, the master, the owner, and the agent of a Singapore vessel discharging NLS into any part of the sea, or of a non-Singapore vessel discharging the same into Singapore waters, shall each be liable to a fine up to S$10,000 (US$7,100) or to imprisonment up to 2 years or to both.

The PPSA, both in the principal Act and in the regulations promulgated under it, goes on to prescribe preventive measures against pollution of the sea, including the provision of reception facilities, the reporting of discharges of oil and substances from ships, and the keeping of oil record books. In Singapore, reception facility services are provided by a company -- Singaport Cleanseas Pte Ltd, which is a member of the Port of Singapore Authority group of companies. Other provisions of the PPSA provide for the Port Master to deny entry to ships which fail to comply with the PPSA or its regulations. Ships in port which fail to comply can be detained pending legal action.

The PPSA expressly excludes pollution from seabed activities from its ambit. There is no legislation governing pollution from seabed activities. With respect to ocean dumping, the relevant provision is Section 6 of the PPSA, which as mentioned above, only prohibits dumping into Singapore waters.

With respect to the operations of the Port of Singapore, the volume of vessel traffic continues to rise, making Singapore one of the busiest ports in the world. In 1994, the volume of shipping passing through the port was 679 million GRT, and total cargo handled was 290 million tonnes. The number of containers handled surpassed the 10 million TEU mark. Singapore's merchant fleet ranked 12th in the world, with 2667 vessels constituting 13.2 million GRT. At the end of 1994, eleven national administrations, including Singapore, had accepted the Asia Pacific Memorandum of Understanding (MOU) on Port State Control, which came into operation in April 1994.

4.2 SUMMARY OF LEGAL REGIME OF LIABILITIES

Section 6, PPSA (discharge of refuse, garbage, wastes, trade effluents, plastics, and marine pollutants): Fine up to S$10,000 (US$7,100) or imprisonment up to 2 years, or both.

Section 7, PPSA (discharge of oil or oily mixtures): Fine from S$500 (US$360) to S$500,000 (US$350,000) or imprisonment for up to 2 years, or both.

Section 10, PPSA (discharge of noxious liquid substances): Fine up to S$10,000 (US$7,100) or imprisonment for up to 2 years or both.

Merchant Shipping (Oil Pollution) Act, implementing the International Convention on Civil Liability for Oil Pollution Damage 1969: Shipowner liable for any damage resulting from discharge or escape of oil into Singapore waters or that of any other Convention country, and for the cost of any

remedial measure taken. Liability limited to 133 special drawing rights for each tonne of the ship's tonnage, or at any rate, not more than 14 million special drawing rights.

4.3 PROSECUTIONS TO DATE UNDER THE PPSA

In 1994, there was one contravention of the Prevention of Pollution of the Sea (Oil) Regulations. The master was fined S$100 for failing to keep proper entries in the Oil Record Book. There were three cases of alleged oil pollution by Singapore ships -- in one case, the owners, master and chief engineer were given warnings. No action was taken in the other two cases. There was also one investigation into a case of alleged pollution by garbage -- the Master was advised to be more careful in the handling of garbage and to obtain receipts for garbage disposed ashore.

In 1993, there were two cases of alleged oil pollution by Singapore ships. In one case, the master and owner were each fined S$200 for contravening the Prevention of Pollution of the Sea Act. In the second case, the second engineer of the vessel was given a warning.

In 1992, four cases of alleged oil pollution by Singapore ships were reported. In one case, the master and owners were each fined S$200 for contravening the Prevention of Pollution of the Sea Act. In two other cases, the masters and owners were cautioned to exercise greater care. In the fourth case, no evidence was found that the vessel had polluted the sea.

In a celebrated case decided in March 1992 (*...ping v. Public Prosecutor*, the High Court of Singapore imposed a S$10,000 (US... the PPSA on the agents of a ship which had caused an oil slick in Singapore wate...er 1991. This was the first prosecution to be brought under the new Prevention of Pollu...n of the Sea Act which gave effect to MARPOL 73/78. On August 25 and 31, 1995, two separate oil pollution incidents occurred, both involving the Singapore Refining Company (SRC). The first of the refinery spills occurred when a valve was left unopened, resulting in 300 tonnes of oil escaping into the sea through a storm-water drain while heavy fuel was being pumped from the SRC's offshore refinery to a Caltex terminal. The second occurred on August 31 when 10 tonnes of oil leaked from a crack in the bottom plate of a storage tank. The SRC was prosecuted in court by the Port of Singapore Authority under the PPSA, and was fined S$150,000 (USD 107,000) for the spill. This is the largest fine so far to be imposed under the provisions of the PPSA.

4.4 PROSECUTIONS UNDER THE OTHER RELEVANT ACTS

Please refer to Appendix III. In 1994, there were 269 cases of contravention of the Trade Effluent Regulations, attracting a fine of S$334,400 (US$240,000). There was one contravention of the Toxic Industrial Waste Regulations, attracting a fine of S$1,000 (US$714).

4.5 ENVIRONMENTAL IMPACT ASSESSMENT (EIA) REQUIREMENTS

There is at present no legislation in Singapore making EIAs compulsory for major projects. However, as and when the Ministry of Environment deems a particular project to have sufficient potential for pollution that may affect public health, an EIA may be required. As far as projects affecting the marine environment are concerned, an EIA had been required of the building of the Ayer Merbau Island petro-chemical complex. EIAs have also been required for a gasworks plant in Queenstown, and of refuse incineration plants. With respect to foreign investment in Singapore, projects using or

storing large quantities of hazardous substances are required to engage third-party consultants to conduct EIAs to support the establishment of a plant in Singapore. The Ministry of the Environment has recommended a general format for EIA reports.

4.6 USE OF MARKET-BASED INSTRUMENTS

The unregulated discharge of effluents into the sewerage system may have serious repercussions for the marine environment, as sewage may seep into river systems and be carried into the sea. The Water Pollution Control and Drainage Act, Trade Effluent Regulations 1976 (Regulation 4) allows discharges of effluent directly into the sewerage system; permits are granted on application giving details of the source, type and toxicity of effluent, particulars of the trade or process generating the waste, and forms of pre-treatment. As of 1993, some 310 industries, especially in the food processing sector, have opted to discharge their untreated trade effluent directly into sewers on payment of a tariff. Since its introduction in 1977, the tariffs have been raised on numerous occasions to reflect higher costs. In 1994, trade effluent charges alone amounted to S$4,215,000 (US$3 million).

4.7 INSTITUTIONAL ARRANGEMENTS: DISTRIBUTION OF MANDATES AND OBLIGATIONS

Singapore has a monocameral Parliament. Consequently, all problems arising from pollution are controlled at the national level. The government instrumentalities involved in marine environment policy are: the Ministry of the Environment, the Marine Department, the National Maritime Board, and the Port of Singapore Authority. As of 2 February 1996, a new public corporation called the Maritime and Port Authority of Singapore (MPA) has come into being. The new Authority assumes the functions of the Marine Department and the National Maritime Board, and certain functions of the Port of Singapore Authority. Under the Prevention of Pollution of the Sea Act (PPSA), the appointed authority overseeing the implementation of the PPSA's provisions is now the MPA and any person appointed by the Minister. (Previously, the appointed authority was the Director of Marine, the Port of Singapore Authority, and any person appointed by the Minister.) Prosecutions under the PPSA would remain the province of the Public Prosecutor (the Attorney-General's Chambers).

4.8 ROLE OF NON-GOVERNMENT ORGANIZATIONS (NGOs)

Whilst there is no NGO in Singapore whose specific mission is the protection of the marine environment, there are a number of NGOs which purport to represent the interests of the environment in general. Particularly relevant to the marine environment may be the Singapore Manufacturers' Association (SMA) Environment Committee, the Singapore Association for Environmental Companies (SAFECO), and the Singapore Chemical Industry Council (SCIC). The latter is represented by more than 80 percent of the multinational companies (MNCs) and local companies engaged in the chemical industry.

5.0 CONCLUSION

The small size of Singapore and the unicamerality of its legislature makes for relatively effective prescription and enforcement of marine pollution laws. The attitude of the Singapore government appears to be that no international convention should be ratified merely for the sake of ratification. Once it accedes to or ratifies an international convention, Singapore has always taken the obligations arising therefrom seriously - this is done by the enactment of the corresponding implementing legislation and the effective enforcement of these laws through the administrative and court systems. The sheer volume of vessel traffic passing through the port of Singapore will pose a continuous challenge for the port to maintain its vigilant enforcement of prescribed pollution control rules and standards.

The views expressed in this paper are the personal opinions of the author

MARINE POLLUTION LEGISLATION IN THE PHILIPPINES

Wilfredo Saraos, Brenda Pimentel, and Ma. Teresa Dizon

1.0 BACKGROUND ON MARINE AND COASTAL ENVIRONMENT AND RESOURCES

The Philippines' marine environment and resources are in a sad state. Pollution of the country's marine resources has greatly contributed to the rapid depletion of mangroves, decimation of coral reefs and rapid decline in fisheries yield. Urbanization and industrialization are also major contributors to the rapid changes in the marine coastal areas of the Philippines.

Sixty of the country's seventy-five provinces, over 900 of its municipalities, and almost all of its major cities are coastal.

The mangrove ecosystem, which serves as nursery ground for various fish, prawns, crabs, bivalves and other invertebrates and serves as land builder and buffer zone against typhoons and wave action, are also the source of wood used for firewood, charcoal, tanning and dye barks, and construction materials. Only 27.28 percent of the estimated 500,000 hectares of mangrove documented in 1918 remain. The fast reduction of mangrove resources is caused mainly by harvesting for the aforementioned activities and forest clearing for conversion to fishponds and expansion of coastal communities. Government policies are apathetic to mangrove loss.

Coral reefs are considered a material component of the country's coastal zone. Their degeneration are caused by siltation, natural calamities, destructive fishing practices, collection of corals for ornamental handicrafts and construction purposes, and industrial and agricultural pollution.

Organic water, trace metals, organo-chlorides, and pathogens are common contaminants in Philippine coastal waters. Mine tailings pollution greatly affects coral reefs, particularly copper mine tailings in Toledo City, east coast of Cebu; Southern Negros; and Calancan Bay in Marinduque. Red tide, which might be considered an indicator of the state of the marine environment, is a common occurrence in Philippine coastal areas.

Due to the archipelagic nature of the Philippines as well as it being a transit point, many shipping activities take place in its waters and this causes oil pollution and contamination.

2.0 MARINE POLLUTION: LEGISLATION AND ADMINISTRATIVE ISSUANCES

In 1964, Republic Act No. (RA) 3931 was passed, creating the National Water and Air Pollution Control Commission, prohibiting the discharge of "any organic matter or inorganic matter or any substance in gaseous or liquid form that shall cause pollution" in any of the waters of the country. This law was amended by Presidential Decree Number (PD) 984 (1976), which is the main pollution

control law to this day. This law mandates the pollution control agency (now the Pollution Adjudication Board of the Environmental Management Bureau under the Department of Environment and Natural Resources) to regulate pollution.

With regard to the marine environment, PD 600 (1974), established as a policy of the state the prevention and control of the pollution of seas by the dumping of wastes and other matter which create hazards to human health, harm living resources and marine life, damage amenities, or interfere with the legitimate uses of the sea within its territorial jurisdiction. This was subsequently revised by PD 979, known as the Marine Pollution Decree of 1976.

PD 979 declares unlawful the discharge of oil, noxious gases and liquid substances and other harmful substances into or upon the territorial and inland navigable waters of the Philippines. Likewise, it prohibits the deposit of any refuse matter of any kind into any navigable water or on the bank of any tributary of any navigable water.

Violations are punishable with a fine of not less than P200.00 nor more than P10,000.00 or imprisonment of not less than 30 days nor more than one (1) year, or both such fine and imprisonment. This is without prejudice to the civil liability of the offender.

The Environmental Management Bureau (EMB) has the primary responsibility of promulgating national rules and policies governing marine pollution, including the discharge of effluents from any outfall structure, industrial and manufacturing establishments or mill of any kind.

PD 601, the Revised Coast Guard Law of 1974, authorizes the Philippine Coast Guard (PCG) to enforce "all applicable laws upon the high seas and territorial waters of the Philippines," and to "enforce laws, promulgate and administer regulations for marine environmental protection of the territorial waters of the Philippines."

The PCG is mandated to promulgate its own rules and regulations in accordance with the policies set by the EMB and has the primary responsibility of enforcing the laws, rules and regulations governing marine pollution. Likewise, it is tasked to develop an adequate capability for containment and recovery of spilled oil for inland waters and high seas use.

To effect this mandate, the PCG has issued the following Memorandum Circulars (MCs):

- MC No. 02-80 provides for accreditation of oil water separators, oil containment, recovery and dispersal equipment and chemical dispersants.

- MC No. 05-83 prescribes the regulations for the issuance of International Oil Pollution Prevention Certificate to Philippine registered vessels engaged in domestic and overseas trading.

- MC No. 01-85 prescribes the rules and regulations for tank cleaning operation of vessels and oil tankers. Penalty for violation is limited to P5,000.00 for the master of the vessel, shipowners and accredited tank cleaning operators.

- The Coast Guard has periodically issued MCs on the "Prevention, Containment, Abatement and Control of Marine Pollution", implementing the provisions of RA 3139, PD 984, PD 600, and PD 979 as rationalized in accordance with the International Convention for the Prevention of Pollution from Ships, MARPOL, 73/78. In past years were issued MC Nos. 02-77, 03-91. The

most recent is MC No. 03-94. It applies to all marine pollution in all bodies of water within the territorial jurisdiction of the Philippines, including ports, harbours, coastlines, lakes, rivers and their tributaries. It defines marine pollution as "the alteration of the physical, chemical and biological properties of any body of water as a result of discharges of substances in any form, liquid, gaseous or solid, that will or likely to create or render such waters harmful, detrimental or injurious to public health, marine life, sea birds, safety and welfare as well as domestic, commercial, industrial, agricultural, recreational or other legitimate uses."

Further, it provides for a schedule of administrative fines/penalties for first, second, and third offenses/violations. In addition, it requires the parties responsible for spills and discharges to conduct clean-up operations using their own personnel and resources. PCG may require a cash bond to cover clean-up and containment costs. However, regulation pollution from land-based sources such as manufacturing and industrial establishments shall be the responsibility of the EMB.

The Maritime Industry Authority (MARINA), a policy-making and regulatory body, was created in 1975 by PD 474, with authority over all aspects of the maritime industry, including vessel accreditation, port development, and seafarers. It is specifically empowered to "prescribe and enforce rules and regulations for the prevention of marine pollution in bays, harbors and other navigable waters of the Philippines, in coordination with the government authorities concerned" Sec. 12(i).

MARINA issued on 04 December 1991 Memorandum Circular Nos. 56 and 56-A, directing owners/operators of tankers and barges hauling oil and/or petroleum products in the Philippine waterways and coastwise shipping to be covered by a recognized insurance company, protection and indemnity clubs or their equivalent against oil/marine pollution risks in the amount equivalent to US$ 300 million if the tanker barge has 700,000 liters or more capacity, or US$ 10 million if the tanker/barge has less than 700,000 liters capacity.

The Philippine Ports Authority (PPA), on the other hand, issued Memorandum Circular No. 07-95 which adopted PCG Memo No. 01-91 and PCG Memo No. 02-91 on the dumping and discharge of wastes and other harmful matter at sea. Likewise, PPA Circular No. 07-95 requires all ships calling at Philippine ports to comply with IMO regulations on the discharge of wastes and other pollutants. One of its authorities is MARPOL 73/78.

Moreover, PPA issued PPA Administrative Order No. 16-95 which makes it mandatory for all vessels calling at any Philippine port to dispose of their oil, sewage and garbage wastes at the reception facilities to be provided by the PPA and/or its duly accredited private contractor.

National Integrated Protected Area System

Another aspect of environmental legislation in the Philippines is the enactment on 01 June 1992 of RA 7586, otherwise known as the National Integrated Protected Area System or NIPAS. NIPAS encompasses outstanding remarkable areas and biologically important public lands that are habitats of rare and endangered species of plants and animals, biogeographic zones, and related ecosystems, whether terrestrial, wetland or marine, all of which shall be designated as "protected areas." The law requires that a general management strategy to serve as guide in formulating individual plans for each protected area shall be made to promote the adoption and implementation of innovative management

techniques including, if necessary, the concept of zoning, buffer zone management for multiple use and protection, habitat conservation and rehabilitation, diversity management, community organizing, socioeconomic and scientific researches, site-specific policy development, pest management and fire control. Proposals for activities which are outside the scope of the management plan shall be subject to an environment impact assessment (EIA) as required by law before they are adopted.

As many of the component sites have marine areas, the law is significant. One of the prohibited acts within protected areas is the dumping of any waste products detrimental to the protected area, or to the plants and animals therein. Violation entails penalty of either fine in an amount not less than P5,000.00 nor more than P500,000, exclusive of the value of the thing damaged or imprisonment for not less than one year but not more than six years, or both as determined by the court. If the area requires rehabilitation or restoration as determined by the court, the offender shall also be required to restore or compensate for the restoration of the damage. Likewise, the DENR may impose administrative fines and penalties consistent with this Act.

Environmental Impact Assessment

The environmental impact assessment (EIA) system provides a process whereby an estimate is made of the environmental consequences which may be expected to result from a proposed development activity or project. Established on 11 June 1978 by virtue of PD 1586, the President of the Republic of the Philippines, through Proclamation No. 2146 (1981), declared certain projects, undertakings, and areas in the country as environmentally critical. No person, partnership or corporation may operate any such environmentally critical project or operate within an environmentally critical area without first securing an environmental clearance certificate (ECC). Violation of the same is punishable by suspension or cancellation of the certificate and/or a fine in an amount not exceeding P50,000.00 at the discretion of the Environmental Management Bureau (EMB) or the DENR Regional Executive Director, depending on where the violation took place.

3.0 PUBLIC PARTICIPATION

Public hearings are required in the EIA process. One criterion for the granting of an ECC is social acceptance.

In the legislation process, the Presidential Decrees were passed during a time when there was no public participation in legislation or policy formulation. However, since 1987, public participation is built into the legislative process. Congress is required to consult the public on bills (proposed laws) by holding public hearings. However, results of such hearings are not binding on Congress.

4.0 ROLE OF NON-GOVERNMENTAL ORGANIZATIONS

NGOs have been officially acknowledged to play a big role in all aspects of development as well as protection of the environment. In fact, there exists a large number of NGOs in the Philippines involved in environmental protection activities. These are encouraged, but not institutionalized in process or structure. Their involvement is in the nature of private sector participation.

5.0 PROBLEMS

The following have been identified as problems confronting the effective containment and prevention of marine pollution:

1. Piecemeal legislation and implementation of the laws.

2. No central agency to formulate policies and execute pollution control laws.

3. Lack of public awareness on pollution control.

4. Low level of awareness among shipping companies and operators about the importance of quality service to ensure maritime safety and prevent pollution.

6.0 RECOMMENDATIONS

To urgently address the marine pollution problems, recommended actions include:

1. Coordinated approach in the implementation of pollution control laws, rules, and regulations.

2. Aggressive public information campaign to increase the level of understanding and awareness about the principles of environmental conservation.

3. Partnership between government and the private sector to secure quality service for the general public.

ANNEX 7-H

MARINE POLLUTION LEGISLATION IN THAILAND

Pakorn Prasertwong

The rapid economic development of Thailand has been found not to be compatible with pollution prevention. The marine and riverine pollution caused by communities and industrial activities has become a significant issue.

The major source of pollution in Thailand is land-based, mainly from domestic waste. Waste water from communities is discharged directly to drainage system, canals, rivers and finally to the coastal sea area. It is estimated that 75 percent of land-based pollutant comes from domestic sources and 20 percent from industry. Other significant sources of marine pollution are ocean dumping and vessel sources pollution. Since Thailand is not a member of the MARPOL 73/78 convention, reception facilities for oily wastes and other wastes from ships are not adequate. Although the discharge of waste from ships is prohibited by law, illegal discharging and dumping still occur in Thai waters.

Pollution from seabed activities is not a significant issue for Thailand because the offshore gas production is located outside the Thai territorial sea.

Thailand has more than 20 legislations concerning pollution problems handled by various agencies. Each legislation has its own objective and scope. The cooperation among those agencies should be improved for efficient implementation.

The National Environmental Quality Protection and Promotion Act B.E. 2535 (1992) is supposed to be the umbrella legislation of the country. The Act provides the policies and standard criteria for environment protection. This Act is being implemented by three agencies, namely:

- Office of Environmental Policy and Planning,
- Pollution Control Department, and
- Environmental Quality Promotion.

In addition, the "polluter pays" principle is also mentioned in this Act. The Act requires EIA for certain projects. For example:

- Port and harbour which can accommodate vessels above 500 gross tons
- Land reclamation
- Irrigation dam
- Airport
- Hotel with more than 80 rooms
- Mining
- Petrochemical industry

- Oil refinery
- Gas separating plant
- Chemical plant
- Paper and steel mills

The Harbour Department also handles the legislation called "Navigation in Thai Waters Act B.E. 2456" (1913). This Act deals mainly with marine transportation and one part of it concerns marine pollution. It provides that "A person who discharges petroleum or chemical or any other matters in the rivers, canals, swamps, reservoirs or Thai territorial waters which shall be hazardous to environment and navigation shall be punished with a fine not exceeding 60,000 Baht (US$2,400) or imprisonment for any period not exceeding 3 years or both, and shall reimburse the expense of clean-up operation and indemnity as well."

There are a number of NGOs in Thailand. Most of them are concerned mainly with land environment (forestry, wildlife, and rivers). Some of them are concerned with marine environment but in limited locations. There is one NGO called IESG (Oil Industry Environmental Safety Group) that plays an active role on marine pollution. The group is comprised of major oil companies in the country and works closely with the Harbour Department on oil pollution prevention and response.

Thailand is a member of the International Maritime Organization and has ratified the following conventions:

- International Convention for the Safety of Life at Sea, 1974
- Convention on the International Regulation for Preventing Collision at Sea, 1972
- International Convention on Load Lines, 1966
- Convention on Facilitation of International Maritime Traffic.

ANNEX 7-I

ENVIRONMENTAL LEGISLATION IN VIETNAM

Pham Hao

1.0 INTRODUCTION

Since 1986, Vietnam has started a new period of socio-economic development efforts by shifting from a centrally planned economy into a market-oriented one. The efforts of industrialization, the liberalization of agricultural and industrial production, the promotion of export, the development of service and the opening of the country to foreign investment have brought to Vietnam a relatively rapid economy growth rate and, at the same time, created new aspects of resources and environmental problems.

Today, the environmental protection and sustainable development in Vietnam have become more complex and their management needs appropriate policies, strategies, legislations, education and awareness of the people. In order to achieve sustainable development Vietnam has no better choice than to bring its labour force into full play and utilize efficiently the natural resources, improve and protect the environment as well as to broaden the effective cooperative relations with foreign countries.

Despite many difficulties, Vietnam has been doing all it can possibly do to protect and develop the environment. The environmental legislation in Vietnam is comprised of the laws and regulations developed during the recent decades. An important breakthrough in the overall management of the environment is the promulgation on 10 January 1994 of the Environmental Protection Law concerning basic provisions for the State management of environment.

2.0 MAJOR SOURCES OF MARINE POLLUTION IN VIETNAM

Like the other Southeast Asian countries, Vietnam, with a coastline stretching over 3,200 kilometres and maritime zones covering one million square kilometres, faces serious environmental challenges. Environmental deterioration, industrial pollution, reduction of biodiversity, overfishing, destruction of coastal swamps and diminishing coral are the most serious problems facing Vietnam.

With rapid economic growth and the acceleration of industrialization in the past few years, environmental pollution in Vietnam has become more serious. Urban and industrial areas are more polluted due to the expansion of existing industrial areas and the creation of new ones. The intensification of agricultural production for internal market and export is increasing the need for chemical fertilizers and pesticides, and creating the risk of soil and water contamination in rural areas. The development of oil and gas exploration, exploitation, transportation and processing is also creating the new environmental risk of marine pollution.

- The coastline is highly indented, often fringed with mangroves, coral reefs and a dense river network (a river mouth for every 20 kilometres of the coastline) which is favourable for runoff (900 billion cubic meters of river water pouring into the sea).

- Industrial and urban pollution adversely affects the marine environment (from 60 percent to 70 percent of wastes dumped into the sea comes from these sources). Municipal drainage and sewage from major urban centres, industrial sewage, and pollutants such as heavy metals, insecticides and organic chloride compounds are particularly harmful to the environment. Mineral resources dust and waste gases reduce agricultural cultivated land and forest areas.

- Destruction of mangrove forests is also a serious threat. Nowadays, most mangrove forest areas in Vietnam have been destroyed by the war and the development of aquaculture. The protection and maintenance of mangrove forest ecosystems is seen as an important action to buffer against storms and to prevent erosion to dikes, flooding and submersion.

- Over-exploitation, degradation and destruction of natural water resources have adversely influenced agricultural production and the coastal ecology. Dynamite fishing is extremely dangerous to the environment. In addition, people using explosives to destroy coral reefs in order to produce lime and make souvenirs for tourist could also degrade the ecosystem.

- Offshore oil exploitation and transportation have seriously threatened Vietnam's marine environment. The production of offshore oil is the first and main part of Vietnam's national income. The country has a very small shipping fleet and owns no tanker and therefore its exported oil has to be carried on foreign vessels.

- Pollution generated by vessels and ports are major threats to the marine environment.

- Other marine uses and activities include human settlement (commercial and residential development), mining and industrial development, sea and airport development, communications (some on the seabed), coastal parks and nature reserves, etc. Some of these activities are themselves highly pollutive of coastal waters and need appropriate management to reduce their inputs of pollutants which in severe cases can lead to contamination of the coastal environment with toxic substances such as heavy metal, and red tides which can result in massive fish kills and render the ingestion of infected fish deleterious to health.

3.0 NATIONAL ENVIRONMENT POLICY/LEGISLATION

3.1 NATIONAL PROGRAMMES FOR ENVIRONMENTAL PROTECTION

During the last two decades, the Vietnamese Government and people have carried out various activities for environmental rehabilitation and protection. Systematic and integrated studies on environment in Vietnam started in 1981 with the establishment of the National Research Programme on Resources and Environment (NRPRE) under a decision of the Council of Ministers. The Programme brought together researchers from leading universities and research institutes throughout the country for the carrying out of 20 research projects were which divided into two periods: 1981-1985 and 1986-1990. On 12 June 1991, the Chairman of the Council of Ministers issued the Decision

No. 187-CT for expanding the implementation of the National Plan on Environment and Sustainable Development (National Action Plan). This Plan focused on the following:

- Formation of a management office on environment,
- Developing environmental policies and laws,
- Forming a network to collect data and manage environmental information,
- Setting up an integrated plan for resource development,
- Developing a strategy for sustainable development in all branches,
- EIA/Management of environmental risk.

Based on these directions, the National Scientific and Technology Programme for Environment Protection (1991-1995) -- Environmental Protection Programme (EPP), one of the major national research programmes -- was established by the State Committee of Sciences (now the Ministry of Science, Technology and Environment) under Decision No. 246-CT of 8 August 1991 of the Chairman of the Council of Ministers. The overall objective of the Programme is the identification of the resources and environmental issues creating constraints to the sustainable development of the country and proposal of scientific and technological measures for the solution. It includes 17 research projects carried out by 30 leading universities and research institutes, in four sections:

- Environmental Control and Monitoring (2 projects)
- Environmental Engineering (5 projects)
- Ecosystems Management (6 projects)
- Socio-Economic Problems of Environmental Protection (4 projects)

Along with the National Action Plan, the Government of Vietnam set up the Ministry of Science, Technology and Environment (1992) and approved, in December 1995, the National Programme on Biodiversification of Vietnam. MOSTE is developing a new National Programme to respond to oil spills and will submit the plan to the government for approval in the near future.

These efforts obviously could not fully meet the important and urgent demands of environmental protection in the country, but they have contributed positively to slow down the degradation and deterioration. However, all the above-mentioned environmental issues still remain as urgent problems demanding solutions.

3.2 ENVIRONMENTAL LEGISLATION

The environmental legislation in Vietnam has developed on a gradual scale along with society's increasing awareness of the problems affecting the environment. It only provided general basis for an overall management, which is of importance to the national development. In the last decade, laws and regulations were enacted to conserve marine resources, the living environment and nature, and relating to health and sanitation, working conditions, etc.

However, only in 1994 was legislation enacted with the purpose of dealing directly with environmental issues. This legislation is the fundamental legal basis for handling of the crucial issue which determines sustainable development of our nation in the future. The legislation is a broad statement of principles with little specific detail to marine pollution.

(1) *The 1994 Environmental Protection Law (EP Law)*

To provide an 'umbrella' for regulations related to the environment, a draft law was prepared by MOSTE for environmental protection and sustainable development. The draft process was started in 1991 and escalated in 1992 after the Rio Summit Conference. In 1993, the draft law was submitted by the government to the National Assembly which accorded it high priority. It was unanimously approved by the IX Session of the National Assembly on 27 December 1993.

As State party to a number of international conventions affecting maritime safety, such as MARPOL 73/78, SOLAS 74 and UNCLOS 82, Vietnam has incorporated in its EP Law the principles of those documents and the Rio Declaration of Environment and Development. The EP Law consists of seven chapters and is preceded by a preamble. In the first Chapter (General Provisions), the Law stipulates the principles of the responsibilities and obligations of the State and people to protect the environment and to contribute to the protection of regional and global environment. Chapter II stipulates that all existing productive projects as well as organizations should conduct environmental impact assessment, and also defines prohibition of actions damaging the environment. Chapter III stipulates the responsibilities of organizations and individuals to pay for the damage they cause to the environment. Chapter IV defines the functions and duties of the State management bodies: the Ministry of Science, Technology and Environment is responsible for the government in implementing the overall State management functions on environmental protection. Other ministries, subject to their defined statutory mandates, are responsible for their corresponding tasks with regard to environmental protection. This Chapter also defines activities and functions of the Environment Monitoring System. Chapter V stipulates the obligations of the Vietnamese Government to cooperate with the international community in the matter of global environmental protection. Chapter VI deals with the reward of those organizations and individuals which contribute to the cause of environment protection and the punishment for those who violate of these laws. Chapter VII contains the implementation provisions.

(2) *Other Legislations Relevant to Vietnam's Environment*

Besides the EP Law, Vietnam has also promulgated a number of other legislations which are partly concerned with related aspects of environment in specific fields. A set of under-law regulations such as ordinances and decrees have been issued.

- On 12 May 1977, Vietnam issued the Government's Statement (Statement of the Government of the Socialist Republic of Vietnam on the Territorial Sea, the Contiguous Zone, the Exclusive Economic Zone and the Continental Shelf of Vietnam), in which Paragraph 3 covers the jurisdiction of Vietnam with regard to the preservation of the marine environment and activities for pollution control and abatement in the zone beyond the territorial sea to about 200 nautical miles.

- The 1980 legislation (Decree No.30/CP of 29 January 1980 of the Government of the Socialist Republic of Vietnam on Regulations for Foreign Ships Operating in the Maritime Zones of Vietnam), establishes the general framework of duties and obligations regarding the pollution in Vietnam's maritime zones. Strict liability is adopted for polluters which includes liability for damages caused by the pollution and rehabilitation costs.

- Ordinance on conservation and management of Vietnam's marine resources, 25 April 1989.

- Decree on People's Health Protection, issued in 1989.
- Maritime Code of Vietnam, 30 June 1990.
- Decree No. 242/HDBT of 5 August 1991 of the Council of Ministers of the Socialist Republic of Vietnam on Regulation for Foreign Parties and Ships and Other Equipment Conducting Scientific Research in Vietnamese Maritime Zones.
- Law on Protection and Development of Forests, 1991.
- Decree on Mineral Resources, 22 March 1992.
- Petroleum Law, 6 July 1993.
- Law on Land, 14 July 1993.
- Labour Code of Vietnam, 23 June 1994.

3.3 RATIFICATION OF INTERNATIONAL CONVENTIONS

Vietnam is a State Party to the following international conventions:

- The UN Convention on the Law of the Sea (UNCLOS 82).
- International Convention for the Preventi[illegible]lution from Ships, 1973 and its Protocol of 1978 (MARPOL 73/78).
- International Convention for the Safety of Life at Sea (SOLAS 1974).
- International Convention on Tonnage Measurements of Ships.
- Convention on the International Regulation for Preventing Collision at Sea (COLREG) 72.
- Vienna Convention on Ozone Layer Protection and the Montreal Protocol on Substances that Deplete the Ozone Layer.
- Convention on Global Climate Change.
- Convention on Protection of Biodiversity.

MARINE POLLUTION LEGISLATION IN CHINA

Zhang Hai-Wen, Ph.D.

1.0 INTRODUCTION

The problem of marine pollution attracted people's attention in the early 1970's in China. However, national legislation on marine pollution started only in the 1980's. The structure of laws and regulations on marine pollution can be described as follows.

1.1 LAWS

- *The Marine Environmental Protection Law*, promulgated by the Standing Committee of NPC on August 23, 1982, and effective as of March 1, 1983.

1.2 REGULATIONS

- *Regulations Concerning Environmental Protection in Offshore Oil Exploration and Exploitation*, promulgated by the State Council on December 29, 1983.
- *Regulations Concerning the Prevention of Pollution of Sea Areas by Vessels*, promulgated by State Council on December 29, 1983.
- *Regulations Concerning the Dumping of Waste at the Sea*, promulgated by the State Council, March 6, 1985.
- *Regulations Concerning Prevention of Pollution Damage to the Marine Environment by Coastal Construction Projects*, adopted by the State Council on May 25, 1990 and effective as of August 1, 1990.
- *Regulations Concerning Prevention of Pollution Damage to the Marine Environment by Land-Based Pollutants*, adopted by the State Council on May 25, 1990 and effective as of August 1, 1990.
- *Regulations Concerning Prevention of Environmental Pollution by Ship-Breaking*, promulgated by the State Council on May 18, 1988.

1.3 MINISTERIAL REGULATIONS ON TECHNOLOGICAL AND ENVIRONMENTAL STANDARDS, ISSUED BY THE CONCERNED ADMINISTRATIONS OF GOVERNMENT.

1.4 LOCAL REGULATIONS AND STANDARDS, PROMULGATED BY SOME LOCAL GOVERNMENTS OF COASTAL AREAS.

1.5 CLAUSES RELATED TO MARINE POLLUTION IN SOME LAWS AND REGULATIONS ON ENVIRONMENT AND NATURAL RESOURCES.

1.6 INTERNATIONAL CONVENTIONS RATIFIED BY THE GOVERNMENT OF CHINA.

At the present time, the Marine Environmental Protection Law has initially established the prevention and management of marine pollution in the legal system of China.

2.0 LEGAL SYSTEMS AND RULES ON MARINE POLLUTION BY MAJOR SOURCE

2.1 LAND-BASED SOURCES OF POLLUTION

Discharge Fee and Responsibility for Improvement -- The discharge of land-based pollutants into the sea by any entities and individuals must be conducted in compliance with the standards for discharge and relevant regulations set down by the state or the local governments.

One who has discharged pollutants into the sea in excess of the state and local standards must pay a discharge fee and be responsible for the improvement of the situation within a prescribed time limit.

It is prohibited to discharge waste water containing high-level and medium-level radioactive matter, oils, acid liquid, alkaline liquid and venom into the sea. Medical sewage, industrial waste water and municipal sewage may be discharged into the sea only if they are properly treated and meet applicable criteria. However, the discharge of industrial waste water and domestic sewage containing organic and nutrient matter into bays, semi-enclosed seas and other sea areas with low capacities of absorption shall be put under control so as to prevent eutrophication of the sea water therein.

Regulation on marine pollution by rivers provide that the control of the rivers emptying into the sea shall be strengthened so as to ensure the good quality of the water in the estuaries.

Up to this date, there is still a gap in existing laws and regulations on marine pollution by atmosphere in China.

2.2 OCEAN DUMPING

Dumping Waste License -- An entity which intends to dump wastes at the sea shall make an application to the competent authority and submit with it a test paper on the characteristics and composition of the wastes. The competent authority examines and acts on the application within two months of the receipt of the application. Dumping wastes license which shall clearly indicate the waste dumping entity, term of validity, quantities and categories of the wastes, and method of dumping shall be issued to those whose applications are approved.

The dumping areas in the sea shall be designated by the competent authority, in consultation with the departments concerned on the scientific, rational, safety and economical bases, subject to approval by the State Council.

tonnage. Vessels must observe the prescribed procedures and take effective measures to prevent marine pollution.

2.4 POLLUTION FROM SEABED ACTIVITIES

For a long time, the laws and regulations on pollution from seabed activities almost involved offshore oil exploration and exploitation which are still the main types of seabed activities. Now, there is a little amount on sand-and-gravel dredging.

Entities which intend to produce from the exploration and exploitation of offshore oil shall prepare Environmental Impact Statements and must have the capacity to handle emergencies. They must also have procedures for dealing with oil pollution accidents. Fixed and mobile platforms shall have Antipollution Record Books and be provided with antipollution equipment. The offshore oil-storage installations and oil pipelines are required to be kept in good condition so as to prevent oil leakage accidents.

3.0 ENVIRONMENTAL IMPACT ASSESSMENT

All entities and individuals who build fixed and mobile platforms and related installations for exploitation of offshore oil, as well as coastal construction projects such as ports, shipyards, oil depots, mines and construction projects, to discharge waste water of cities into the sea and so on, must draw up an Environmental Impact Statement at the stage of feasibility research and submit it to the concerned department for examination and approval with the pre-examination by the competent authority in charge of the projects and the relevant competent authority according to the stipulated procedures. This makes it possible to strictly control new pollution and to protect and improve the marine environment.

4.0 LEGAL REGIME OF LIABILITIES FOR MARINE POLLUTION DAMAGES

The following are the legal liabilities of entities/individuals for marine pollution damages.

- remedy the pollution damage within a definite time;
- be ordered to stop and close down;
- pay a sum of discharge fee;
- pay the cost for eliminating the pollution;
- compensate for the loss sustained by the state;
- be given an administrative warning;
- pay a fine; and
- bear criminal responsibility.

5.0 NATIONAL LEGISLATION REGULATORY STRUCTURE AND PROCEDURES ON MARINE POLLUTION

Distribution of Mandates and Obligations

The Environmental Protection Department under the State Council is in charge of marine environmental protection in the whole country, managing the matters of Environmental Impact Statement, issuing the environmental and other standards, etc.

The State Administrative Department of Marine Affairs is responsible for organizing investigations, monitoring and surveillance of the marine environment and for conducting scientific research therein; it is also in charge of environmental protection against marine pollution damage caused by offshore oil exploration and exploitation and by the dumping of wastes into the sea, as well as monitoring some special marine reserves and marine sanctuaries.

The Harbor Superintendency Administration is responsible for overseeing, investigating and dealing with the discharge of pollution from vessels and for keeping under surveillance the waters of the port areas; it is also in charge of environmental protection against pollution damage caused by vessels.

The Stage Agency in charge of Fishery Administration and the Fishing Harbor Superintendent are responsible for supervising the discharge of wastes by vessels in the fishing harbors and for keeping under surveillance the waters thereof.

The Environmental Protection Department of the Armed Forces is responsible for supervising the discharge of wastes by naval vessels and keeping under surveillance the waters of the naval ports.

6.0 PUBLIC PARTICIPATION

All entities and individuals having access to the jurisdiction of the P.R.C. shall protect the marine environment and watch for the report on actions polluting and damaging the marine environment thereof.

7.0 IMPLEMENTATION OF INTERNATIONAL INSTRUMENTS

China has ratified and is implementing the main international conventions on marine pollution. The following will show the status of ratification of international conventions related to marine pollution.

- signed UNCLOS (1992)
- ratified MARPOL 73/78 without Annex IV. The department in charge of implementation: the Ministry of Communications
- ratified London Convention (1972) without its Amendment (1978). The department in charge of implementation: the State Oceanic Administration
- ratified Intervention Convention (1969) and its Protocol (1973). The department in charge of implementation: the Ministry of Communications

- ratified CLC Convention (1969) and its 1976 Protocol, but not the 1992 Protocol. The department in charge of implementation: the Ministry of Communications
- did not ratify Fund Convention
- ratified SAL (1989)
- did not ratify OPRC (1990)

ANNEX 8

TABLE A: NATIONAL LEGISLATION ON MARINE POLLUTION BY SOURCE

Country	Marine Pollution in General	Pollution by Source			
		Land-Based Sources of Pollution	Ocean Dumping	Vessel-Source Pollution	Pollution From Seabed Activities and Other Sources
Cambodia		o Ministry of Environment order prohibiting new shrimp farms o Prakas No 992 (May 23, 1994), prohibiting discharge of liquid industrial waste and sewage into the sea		Sub-decree No. 11, Mar 5, 1983, prohibiting discharge of waste by ships at port	In contract provisions, but not governed by any law
China	Marine Environmental Protection Law (1983)	o Chap. 2, Marine Environmental Protection Law, on the Prevention of Pollution Damage to the Marine Environment by Coastal Construction Projects o Chap.4, Marine Environmental Protection Law, on the Prevention of Pollution Damage to the Marine Environment by Land-Based Pollutants o Regulations concerning prevention of pollution damage to the marine environment by coastal construction projects (1990) o Regulations concerning prevention of pollution damage to the marine environment by land-based pollutants (1990)	o Chap.6, Marine Environmental Protection Law, on the Prevention of Pollution Damage to the Marine Environment by Dumping of Wastes o Regulations concerning the dumping of wastes at sea (1985)	o Chap.5, Marine Environmental Protection Law, on the Prevention of Pollution Damage to the Marine Environment by Vessels o Regulations concerning the prevention of pollution of sea areas by vessels (1983) o Regulations concerning prevention of environmental pollution by ship-breaking (1988)	o Chap.3, Marine Environmental Protection Law, on the Prevention of Pollution Damage to the Marine Environment by Offshore Oil Exploration and Exploitation o Regulations concerning environmental protection in offshore oil exploration and exploitation (1983)

Country	Marine Pollution in General	Pollution by Source			
		Land-Based Sources of Pollution	Ocean Dumping	Vessel-Source Pollution	Pollution From Seabed Activities and Other Sources
Indonesia (Note: Ratified international conventions have the force of law. See table of ratifications below.)	o Act No 4/ 1982 -- Basic Provisions for the Mgmt of the Environment (EMA) o Ministry of Environment Decree No Kep-02/MNKLH/I/1988 on Marine Water Quality Standards o Act No 5/1990 on Natural Resources and Ecosystem Conservation o Act No 24/1992 on Spatial Planning	o Act No 5/1984 on Industry, requiring industrial enterprises to make efforts to prevent damage and pollution to the environment o Ministry of Industry Decree No. 20/M/SK/1/1986 on Control of Industrial Pollution to the Environment o Government Regulation No 19/1994 and 12/1995 on mgmt of hazardous and toxic substances disposal o Act No 11/1967 on Mining? o Act No 12/1992 on Horticulture System, regarding fertilizer and pesticide use o Government Regulation No. 7/1973 on the Control, Distribution, Storage and Use of Pesticides o Ministry of Agriculture Decree No 280/Kpts/Um/6/1973 on Registration and License Application Procedure for Pesticide o Ministry of Agriculture Decree No. 429/Kpts/Um/9/1973 on Packaging and Labelling Conditions for Pesticide o Ministry of Agriculture Decree No. 944/Kpts/TP.270/11/1984 on Limitation for Pesticide Registration	o EMA o Act No 5/1983 on the EEZ, requiring a permit for dumping in the EEZ	o Decision of the Ministry of Communication No KM 86 /1990 o Ministry of Communication Decree No 167/HM.207 /Phb-86 o Act No 1/1973 on the Continental Shelf (?) o Act No 24/1992 on Navigation?	Act No 1/1973 on the Continental Shelf (?)
Japan	o Water Pollution Control Law (Law No. 138, 1970) o Law Concerning Special Measures for the Conservation of the Sea	o Law Concerning Special Measures for Conservation of the Environment of the Seto Inland Sea (Law No. 110, 1973, amended 1976, 1978) o Act on Disposal of Waste and Sewerage	o Law Concerning Special Measures for Conservation of the Environment of the Seto Inland Sea (Law No. 110, 1973, amended 1976, 1978) o Marine Pollution and Disaster Prevention Law (Law No. 136, 1970), preventing the discharge of oil, harmful liquid and any substances, waste materials from vessels and marine facilities	o Marine Pollution and Disaster Prevention Law (Law No. 136, 1970, amended 1983), preventing the discharge of oil, harmful liquid and any substances, waste materials from vessels and marine facilities o Port Rule Act	

Country	Marine Pollution in General	Pollution by Source			
		Land-Based Sources of Pollution	Ocean Dumping	Vessel-Source Pollution	Pollution From Seabed Activities and Other Sources
Malaysia	Environmental Quality Act 1974 (EQA)	o Environmental Quality (Licensing) Regulations 1977, on control of agro-based water pollution o EQ (Prescribed Premises) (Crude Palm Oil) Regulations 1977, on control of agro-based water pollution o EQ (Prescribed Premises) (Raw Natural Rubber) Regulations 1978, on control of agro-based water pollution o EQ (Sewage and Industrial Effluent) Regulations 1979, on control of municipal and industrial wastewater pollution o EQ (Schedule Wastes) Regulations 1989, on control of toxic and hazardous wastes, and their transboundary movement o Customs Act 1967, Amendment Orders No. 2 and No. 3 1993 on prohibition of exports -- toxic and hazardous waste o EQ (Prescribed Premises) Scheduled Waste Treatment and Disposal Facilities Order 1989 (P.U. (A) 140), on control of toxic and hazardous wastes o EQ (Prescribed Premises - Scheduled Waste Treatment and Disposal Facilities) Regulations 1989 (P.U. (A) 141), on control of toxic and hazardous wastes o Motor Vehicle Rules 1977, on control of smoke and gas emissions o EQ (Clean Air) Regulations 1978 o EQ (Control of Lead Concentration in Motor Gasoline) Regulations 1985		o Merchant Shipping Ordinance 1952 - Part VA o Merchant Shipping (Oil Pollution) Act 1994 (PU (B) 144/95), making shipowner liable for pollution caused by vessel, & requiring mandatory insurance for ships carrying more than 2,000 tonnes of oil, & fixing the limits for liability o EQA o EEZ Act 1984	o Continental Shelf Act 1966 (Revised 1972) o Petroleum Mining Act 1966 o Petroleum Devt Act 1974 o Petroleum (Safety Measures) Act 1984 o EEZ Act 1984

Country	Marine Pollution in General	Pollution by Source			
		Land-Based Sources of Pollution	Ocean Dumping	Vessel-Source Pollution	Pollution From Seabed Activities and Other Sources
Philippines	o Presidential Decree 600, amended by PD 979 (1976), on Marine Pollution o RA 3931, revised by PD 984 (1976), the Pollution Control Law o Phil. Coast Guard Memorandum Circular 03-94 (Prevention, Containment, Abatement and Control of Marine Pollution) o Republic Act No. 7586 (National integrated Protected Area System) (1992)	o PD 1144, regulating fertilizers and pesticides o Fertilizer & Pesticide Authority Rules and Regulations No. 1 s. 1977, on the importation, manufacture, formulation, repacking, distribution, delivery, sale, storage and use of pesticides o Sec. 81, PD 463, prohibiting pollution from mine wastes and mill tailings o PD 1251, providing for a "Mine Wastes and Tailings Fee" to compensate for damages o Arts. 47 & 48, PD 705, regulating mining in forest lands o Art. 77, PD 1067, prohibiting the dumping of tailings in rivers or waterways o Title V, PD 1152, on waste management o Sec. 17b2(vi), Local Gov't Code, on facilities for solid waste o PD 825, on proper disposal of garbage o Secs. 22, 45, 75, 79, PD 856 (Sanitation Code), on disposal of refuse, sewage disposal, septic tanks, and drainage o RA 6969 (Toxic Substances and Hazardous and Nuclear Wastes Control Act (1990) o DENR Admn. Order 29, on requirements for treatment storage and disposal of hazardous waste	o PCG MC 03-94, prohibiting dumping into the sea of wastes, with exceptions o PCG MC 02-91 (Dumping and Discharges of Wastes and Other Harmful Matter at Sea)	o PD 600 establishing an Oil Pollution Operations Center in the Coast Guard o PCG MC 01-85 on tank cleaning operations of vessels /oil tankers o PCG MC 01-81, on monitoring procedures for SOLAS and maritime environmental protection requirements for domestic vessels o PCG MC 05-83, on the issuance of international oil pollution prevention certificate to Philippine-registered vessels o Phil. Ports Authority Admn. Order 04-85 (Policy on the Prevention and Control of Marine Pollution) o PPA AO 16-95, on reception facilities o Marina MC 56 & 56-A requiring insurance against marine pollution risks	NONE

Country	Marine Pollution in General	Pollution by Source			
		Land-Based Sources of Pollution	Ocean Dumping	Vessel-Source Pollution	Pollution From Seabed Activities and Other Sources
Republic of Korea	o Environment Preservation Act (1977) o Marine/Sea Pollution Prevention Act (1977, wholly amended 1991, Law No. 4365) o The Basic Environment Policy Act (Law No. 4257, 1990)	o Water Environment Preservation Act (Law No. 4260, 1990), which restricts the total input of pollutants into coastal water o Sewage, Sludge and Animal Wastewater Treatment Act (Law No. 4364, 1991) o Waste Management/Control Act (Law No. 4363, 1991)	o Art. 16 and 34, Marine Pollution Prevention Act, regulating the disposal at sea of wastes from ships and sea facilities o Art. 29, Water Environment Preservation Act, prohibiting the dumping of industrial and hazardous wastes into public waters (which includes harbours, ports and coastal areas among others	o Chapter II, Marine/Sea Pollution Prevention Act, regulating discharges from ships	o Art. 34, Marine Pollution Prevention Act, regulating the disposal at sea of wastes from sea facilities o Art. 29, Submarine Mineral Resources Development Act
Singapore		o Part II, Prevention of Pollution of the Sea Act (PPSA) o Water Pollution Control & Drainage Act o Petroleum Act o Environmental Public Health Act	Sec. 6, Prevention of Pollution of the Sea Act (PPSA)	Prevention of Pollution of the Sea Act	NONE
Thailand	National Environmental Quality Protection and Promotion Act (B.E. 2535) (1992)			Navigation in Thai Waters Act (B.E. 2456 (1913)	
Vietnam	o Environmental Protection Law (1994) o Government Statement on the Territorial Sea, Contiguous Zone, EEZ & Continental Shelf of Vietnam	o Art. 5, Ordinance on Mineral Resources		o A National Programme to respond to oil spills being developed o Decree No. 30/CP of 29 Jan. 1980, regulations for foreign ships o Maritime Code of Vietnam (1990)	o Arts. 4-7, 15, 43-44, Petroleum Law (1993) o A National Programme to respond to oil spills being developed

TABLE B: REGIME CHARACTERISTICS IN NATIONAL LEGISLATION

Country	Legal Regime of Liabilities for Marine Pollution Damages	Requirements for EIA	Use of Market Based Instruments	Distribution of Mandates and Obligations	Role of Non-Government Organizations (NGOs)	Requirements for Public Participation
Cambodia	Responsibility to clean up in contract provisions, but not governed by any law					
China	Chap.7, Marine Environmental Protection Law, on the Prevention of Pollution Damage to the Marine Environment on Legal Liabilities	Required for installations for exploration and exploitation of offshore oil and "coastal construction projects"	None.	o Environmental protection department under the State Council o State administrative dept of marine affairs o Harbour superintendency o state agency in charge of fishery administration o environmental protection dept of the armed forces	None.	None.
Indonesia	o Art. 5, EMA, on standing to sue o Art. 7, EMA, on a licensing system o Arts. 20 - 22, EMA, on liabilities, polluter pays principle, etc.	o Art. 16, EMA, for each plan likely to have a significant impact on the environment o Art. 16, Government Regulation No.29/1986, for development proposals likely to have a significant impact on the environment o Government Regulation No 51 /1993, simplifying the EIA process o Decisions of the State Ministry of the Environment No. 11/MENLH/3/ 1994 (Guidelines for EIA) o PD 23/1990 establishing the Environmental Impact Agency as implementing body	o Art. 8, EMA, on incentives and disincentives, using e.g. taxation o Art. 10(3)(c), EMA, on "environmental taxes and retribution", but no implementation	National level (strategic issues): o State Minister of Environment o Director General for Marine Communication, Ministry of Communication o BAPEDAL (Agency for Environment Impact Control) o Environmental Impact Agency o State Ministry of National Devt Planning o 15 other central government agencies At regional level (technical issues): o Regional Devt Planning Agency o Reg'l Investment Coordinating Agency o Environmental Bureau o Environmental Study Centers o Reg'l Sectoral Offices	Supporting role in mgmt of environment, Art 6 (1), EMA, on a voluntary basis	Art. 6(1), EMA, on the right and obligation of every person to participate in the mgmt of the living environment

Country	Legal Regime of Liabilities for Marine Pollution Damages	Requirements for EIA	Use of Market Based Instruments	Distribution of Mandates and Obligations	Role of Non-Government Organizations (NGOs)	Requirements for Public Participation
Japan	o Tort liability under Art. 1, National Compensation Act (Law No. 125, 1947) & Arts. 709 & 719, Civil Code (Law No. 89, 1986) o Act Concerning Criminal Punishment on Pollution Relating to the Health of the Citizen (Law No. 142, 1970) o Oil Pollution Compensation Law (Law No. 95, 1975) o Fundamental Law concerning Counter Measures against Public Nuisance (Law No. 132, 1967)			o Environmental Agency o Prefectures		
Malaysia	o Merchant Shipping (Oil Pollution) Act 1994, on compensation o other laws	o Sec. 34A, EQA, EIA as a prerequisite in project planning in prescribed activities o EQ (Prescribed Activities) (EIA) Order 1987, on the power of the Ministry to prescribe any activity requiring an EIA	o Sec. 17(2), EQA, on license fee conditions o Effluent-related fees o phasing of standards o incentives	o Dept. of Environment o Marine Department o Royal Malaysian Customs and Excise Department o Department of Fisheries o Royal Malaysian Police -- Marine Branch o Royal Malaysian Navy	Role recognized--views sought by government	Sec. 34A(2), EQA
Philippines	o Sec. 7, PD 979, penalizing violations o Sec. 9(b), PD 984, penalizing violations o PCG MC 01-91 o PCG MC 03-94 imposing penalties and clean-up responsibilities o Special laws providing penalties for their violation	o PD 1586 (1978), requiring EIA for "environmentally critical projects" and "environmentally critical areas" o RA 7586, requiring EIA for activities in protected areas	EMB waste program	o Philippine Coast Guard o Maritime Industry Authority (Marina) o Philippine Ports Authority o Environmental Management Bureau, Dept. of Environment & Natural Resources o Local governments o Philippine National Police, Maritime Command	Views of participation different from case to case; no uniform policy	o Required in legislation o Required in EIA process

Country	Legal Regime of Liabilities for Marine Pollution Damages	Requirements for EIA	Use of Market Based Instruments	Distribution of Mandates and Obligations	Role of non-government organizations (NGOs)	Requirements for Public Participation
Republic of Korea	o Arts. 15, 19, 29 & 56, Water Environment Preservation Act o Marine/Sea Pollution Prevention Act, penalizing violations	EIA Act (Law No. 4493, 1993)	o Arts. 19 , Water Environment Preservation Act	o Ministry of Environment o Marine Police Administration, Ministry of Home Affairs o Maritime and Port Administration, Ministry of Construction and Transportation o Fisheries Administration, Ministry of Agriculture, Forestry and Fishery o Science and Environment Office, Ministry of Foreign Affairs	Contribute to public awareness	Required in EIA process
Singapore	o Secs. 6,7,& 10, PPSA o Merchant Shipping (Oil Pollution) Act	May be required by the Ministry of Environment in specific projects	Tariffs on discharge into sewerage system	o Ministry of Environment o Marine Department (now the Maritime & Port Auth. of Sing.) o National Maritime Board (now the Maritime & Port Auth. of Sing.) o Port of Singapore Authority		
Thailand		Nat'l Environmental Quality Protection and Promotion Act		o Office of Environmental Policy & Planning o Pollution Control Department o Environmental Quality Promotion	Oil Industry Environmental Safety Group (IESG) works closely with the Harbour Dep't on oil poll. prevention. & response	
Vietnam	Chap. III & VI, Environmental Protection Law	Art. 17-18, 25, Environmental Protection Law		o Ministry of Science, Technology & Environment (MOSTE), National Environmental Agency (NEA) o Vietnam National Maritime Bureau (VINAMARINE), Ministry of Transport o Ministry of Construction o Other ministries		

ANNEX 9-A

RATIFICATIONS IN EAST ASIA OF INTERNATIONAL CONVENTIONS RELATING TO MARINE POLLUTION

COUNTRY	UNCLOS 82	MARPOL				LONDON Convention		INTERVENTION		CLC			FUND			SALVAGE 89	OPRC 90	BASEL 89
		73/78, Annex I/II	Annex III	Annex IV	Annex V	Conv 72	Amend 78	Conv 69	Prot 73	Conv 69	Prot 76	Prot 92	Conv 71	Prot 76	Prot 92			
Brunei		■								■	■		■					
Cambodia		■	■	■	■					■								
China	■	■	■		■	■		■	■	■	■					■		■
DPR Korea		■	■	■	■													
Indonesia	■	■								■			■					■
Japan	■	■	■	■	■	■	■	■		■	■	■	■	■	■		■	■
Malaysia	■									■			■					■
Philippines	■					■												■
Rep. of Korea	■	■	■		■	■				■	■		■					■
Singapore	■	■	■							■	■							■
Thailand																		
Vietnam	■	■																■

Note: UNCLOS status as of 23 October 1996. Basel Convention status as of 16 August 1996. IMO conventions status as of 1 March 1996.

RATIFICATIONS IN EAST ASIA OF INTERNATIONAL CONVENTIONS INDIRECTLY RELATING TO MARINE POLLUTION

COUNTRY	SOLAS			COLREG 72	LOAD LINES		STCW 78	FAL 65
	Conv 74	Prot 78	Prot 88		Conv 66	Prot 88		
Brunei	■	■		■	■		■	
Cambodia	■	■		■	■			
China	■	■	■	■	■	■	■	■
DPR Korea	■	■		■	■		■	■
Indonesia	■	■		■	■		■	
Japan	■	■		■	■		■	
Malaysia	■	■		■	■		■	
Philippines	■				■		■	
Rep. of Korea	■	■	■	■	■	■	■	
Singapore	■	■		■	■		■	■
Thailand	■			■	■			■
Vietnam	■	■		■	■		■	

ANNEX 10

REPORT OF THE RAPPORTEUR
Mr. Wilfredo Saraos

Yesterday, this Workshop started promptly at 8:30 in the morning with the Opening Remarks by Dr. La Viña, Welcome Remarks by Dr. Chua, and Opening Address by Mr. Tarzi.

Dr. La Viña said that this network is the first to address marine pollution management issues from a legal standpoint as there is, at present, no regional body focused primarily on the development, formulation and implementation of marine pollution legislation in the East Asian region. He expressed the hope that the network would act as a catalyst to the efforts to establish a legislative framework at the regional level to deal with marine pollution problems.

Dr. Chua pointed out that marine pollution has no geographical boundaries; therefore, national, regional and global efforts are necessary to prevent, control and mitigate marine pollution. He said that the GEF/UNDP/IMO Regional Programme for the Prevention and Management of Marine Pollution in the East Asian Seas adopts a holistic, multisectoral and integrated approach to the problem. Dr. Chua posed three challenges to the network members:

1. How the network can effectively contribute to the ratification and implementation of marine pollution-related international conventions;

2. How the network can give advice and technical assistance to the national governments; and

3. How the network can continue operations beyond the lifetime of the Programme, or self-sustainability of the network.

Mr. Tarzi pointed out the importance of the marine environment, recognized by the existence of many international instruments pertaining to it, and expressed the hope that the regional legal network on marine pollution would address the concern of national implementation of legal international instruments, with a view to assisting governments in the ratification of conventions and protocols and strengthening technical capability to implement. He expressed his thanks to the IMO for undertaking this Programme in partnership with the UNDP.

Giving an overview of the Programme, Mr. Adrian Ross said that its objective is to support the efforts of the participating governments in the prevention and management of marine pollution on a long-term and self-reliant basis. He proposed the following strategies to attain this objective:

1. The development of working models for the promotion, ratification, and implementation of conventions. Mr. Ross emphasized that consideration should focus not only on regional and national levels, but on the community level as well, because communities are involved in marine pollution prevention and management;

2. Assistance in the development of technical capabilities;

3. Development and strengthening of regional capacities; and

4. Promotion of sustainable financing for these activities.

Mr. Ross also said that the capacities at the local level should be built up and that the project is not merely about technology but about people as well.

In an overview of international instruments on marine pollution prevention and management, Mr. Beckman pointed out that states in the region should consider that the Convention on the Law of the Sea (UNCLOS 1982) requires ratification of the IMO Conventions as well, and that states should look at the benefits, and not just the burdens, of doing so. Because of the nature of environmental problems, regional cooperation is needed.

To understand these international conventions, one needs to have some knowledge of legal science and policy. Dr. Chua suggested that we look into the possibility of obtaining information through this network.

To achieve the goals of these international conventions, the role of domestic legislation should be emphasized. Prof. Kumamoto pointed out that the process of domestic legislation and their enforcement should be carefully observed by the international organizations concerned.

The latter part of the morning and the whole of the afternoon were devoted to the presentation of country reports of Cambodia, Indonesia, Japan, the Philippines, Republic of Korea, Singapore, Malaysia, Thailand, and Vietnam. The participant from China presented her country report the following day.

Summary of Country Reports:

Cambodia is a party to some international conventions, such as MARPOL. However, there is a lack of laws to implement these conventions.

Japan has gone quite far in the level of its legislation to protect the environment. There is, however, no uniform EIA legislation in Japan as some of the Ministries do not favour such legislation.

Indonesia has various legislation and regulations aimed at preventing or mitigating marine pollution, but these have followed a sectoral approach rather than an integrated approach. International conventions are ratified through an act of parliament or by presidential decree.

In Singapore, there is no specific national legislation directly governing the issue of marine pollution from land-based sources. The only law containing specific provisions establishing the connection between pollution from land and the marine environment is the Prevention of Pollution of the Sea Act (PPSA). The PPSA enacts MARPOL 73/78 in detail in respect of vessel-source pollution.

The Philippines has a number of laws dealing with the marine environment and marine pollution. There is an EIA law and a law establishing an integrated areas protection system. Among these

protected areas are some marine areas. One of the problems perceived is that of overlapping jurisdiction of implementing agencies.

There is an umbrella legislation in Thailand called National Environmental Quality Protection and Promotion Act promulgated in 1992. It provides the standard criteria for environmental protection. The Act is implemented by the following agencies: the Office of Environmental Policy and Planning, the Pollution Control Department and the Environmental Quality Promotion. Another agency involved in marine environment protection is the Harbour Department.

There are a number of laws concerning marine pollution control in the Republic of Korea. The Basic Environment Policy Act provides the basis for setting environmental policies. The Water Environment Preservation Act is the major regulatory statute dealing with land-based sources of pollution. The Marine Pollution Prevention Act regulates marine pollution from vessel activities.

In Vietnam, there is a draft umbrella law to cover regulations relating to the environment. This is the 1994 Environment Protection Law. This draft law incorporates principles from the MARPOL, SOLAS, UNCLOS, and from the Rio Declaration on Environment and Development. Vietnam is party to a number of international conventions, including MARPOL, SOLAS and UNCLOS.

The following constraints to ratification of conventions and implementation of legislation were discussed:

1. A conflict among and overlapping of the jurisdiction of implementing agencies;

2. The issue of political systems: federal government powers vis-a-vis state power;

3. Technical problems such as lack of human resources, difficulty in translating the conventions to the local languages; and

4. Political constraints.

Dr. Choon-Ho Park gave an interesting talk on current maritime legal issues in Northeast Asia. He pointed out that disputes have arisen due to overlapping claims under the 200-mile EEZ limit of UNCLOS.

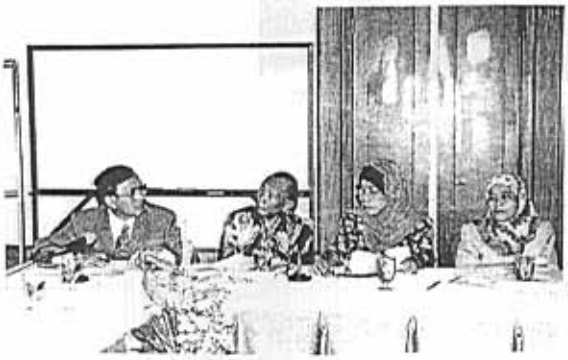
Dr. La Viña then gave a brief overview of the concept and objectives of the network. The participants suggested amendments to the draft Mission Statement (originally titled Founding Charter) of the network. Then, he enumerated and briefly described the projects that the Network hopes to implement in 1996.

Ms. Bernad presented the project on the Legal Information Database, inquired into the needs of the participants with respect to information and data, and asked them to communicate these needs to the Network Coordinator. She also requested the participants to provide and share information and data with the network. It was agreed that the Network will provide an index to the participants and supplement this twice a year.

Finally, Dr. La Viña summarized the conclusions and recommendations agreed upon by the participants.

At the opening session, left to right, Ms. Stella Regina Bernad, Dr. Chua Thia-Eng, Dr. Antonio La Viña, Mr. Farouk Tarzi, and Mr. Adrian Ross.

Dr. Moon Sang Kwon, Mr. Alan Tan, Mr. Robert Beckman, Mr. Pakorn Prasertwong, Mr. Pham Hao, and Ms. Stella Regina Bernad.



Dr. Abdul Rasjid, Dr. Siti Sundari Rangkuti, and Ms. Inar Ichsana Ishak listen to Mr. Sam Chamrouen's presentation.

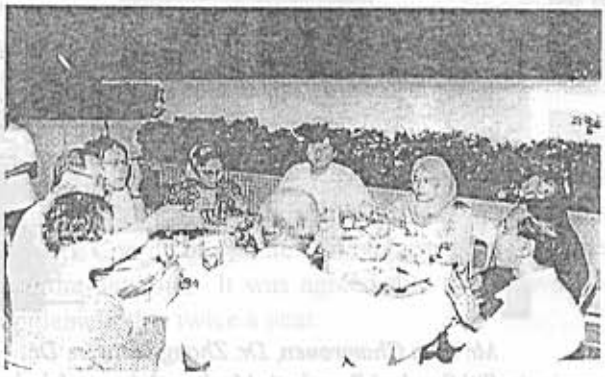
Ms. Brenda Pimentel, Mr. Wilfredo Saraos, Dr. Moon Sang Kwon, and Mr. Alan Tan.

Mr. Sam Chamrouen, Dr. Zhang Haiwen, Dr. Siti Sundari Rangkuti, Ms. Inar Ichsana Ishak, Dr. Abdul Rasjid, Ms. Juita Ramli, and Ms. Suryna Ali.

Dr. La Viña (back to the camera) leads the discussion on constraints to the ratification of international conventions.

Rapporteur Mr. Wilfredo Saraos makes his summary near the end of the workshop.

Dr. La Viña exchanges name cards with Ms. Suryna Ali and Ms. Juita Ramli.



Participants enjoy the dinner in their honor after the workshop.