OIL SPILLS IN VIETNAM – FACTS AND CHALLENGES


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Being a country with more than 3,200 km of shoreline, thousands of islands, and 1 million km² of continental shelf, Vietnam is definitely a marine country. The marine economy is important, and will make up 55-60% Gross Domestic Product (GDP) of Vietnam in the near future. Therefore, oil spills are not only disasters for the environment in general, for the marine environment in specific, but also bring great damage to the socio-economy of a country which is on the move towards global integration and development. This report will provide readers a picture of recent oil spills that have occurred in Vietnam and the challenges in legislation, organization, resources etc. related to oil spill response in Vietnam.

1. RECENT OIL SPILLS IN VIETNAM AND THEIR CONSEQUENCES ON THE SOCIO-ECONOMY AND ENVIRONMENT

According to the statistical data of RDCPSE, there have been 40 oil spills in Vietnam from 1992 to present, resulting in great damage to the ecological system and socio-economy. Major reasons for such large number of oil spills in Vietnam during that time are:

- Vietnam is located on the main oil transportation route from the Middle East to East Asia countries such as China, Japan, and Korea.
- There are many petroleum exploration and production activities in offshore Vietnam and neighboring countries such as China, Thailand, Philippines, Indonesia, Malaysia and Brunei.
- The Vietnam economy is growing rapidly, hence increasing the demand for petroleum products while the infrastructure of transport is still old-fashioned and the legislation is outdated, not parallelling the economic development.

Below are some significant oil spills:

a. Tanker Neptune Aries collided with Cat Lai Jetty, Ho Chi Minh City, on Sai Gon River in October 1994, spilled 1,864 tons of Diesel Oil (DO). The compensation was 4.2 million USD while total assessed loss was 19.0 million USD (Figure 1).
b. Tanker FORMOSA ONE collided with tanker Petrolimex-1 in Ganh Rai Bay, Vung Tau city in September 2001, spilled 750 tons of DO. The compensation was 4.7 million USD while total assessed loss was 14.2 million USD (Figures 2 and 3).
c. Tanker KASCO MONROVIA collided with Cat Lai Jetty, Ho Chi Minh City, on Sai Gon River in January 2005, spilled 518 tons of DO. Up to 1 million USD is being claimed for compensation (Figures 4 and 5).
d. ‘Mystery’ oil spills during January-June 2006 which have occurred along the coastline of 20 provinces/cities from the North to South of Vietnam. Most of spilled oils are crude oil (further details are described in later session).

In overall, oil spills in Vietnam have the following characteristics:

- The major cause of oil spill cases arise from collision of tankers, making up 56% of number of cases having spilled amount less than 700 tons and 100% of number of cases having spilled amount greater than 700 tons.
- There are only 3 cases that have compensation claims settled, equivalent to 8% of the total number of oil spill cases. Six cases are administratively sanctioned (15%) and the others (77%) are not compensated or are being negotiated for settlement.
- The compensated amounts are only 20-30% of the total assessed losses.

2. FACTS OF OIL SPILL RESPONSE IN VIETNAM

For Vietnam, which currently is in the group of the poorest nations, the first priority is given to the economy. However, in parallel to the rapid development, Vietnam is facing a number of environmental issues. With the early awareness of such challenges, the Government of Vietnam (GOV) has had a focus on environmental protection, specifically in protection of the marine environment and oil spill response. This is shown via legislative documents as follows:

- International Convention of Civil Liability for Oil Spill Pollution Damage – 1992 CLC Convention (Vietnam ratified in 2004);
- Environmental Protection Law (promulgated in 2000 and amended in 2005) and relevant regulations;
- National Oil Spill Contingency Master Plan in 2001-2010 (2001);
- Oil Spill Response Regulations (2005);
- Industrial, fishery and maritime specific regulations on oil spill response;
In term of organization, the GOV has achieved the following:

- Establishing the National Committee of Search and Rescue (NCSR), which responding oil spill as one of its principal tasks;
- Building (in progress) three national oil spill response centers for the Northern, the Central and the Southern parts of Vietnam, the Southern center has been completed recently (2006);
- Conducting oil spill training courses, workshops, drills, and exercises with the cooperation of international experts;

From the above activities, it has shown that although of having many economic difficulties, the GOV has been working to join the international community in the field of responding to oil spills and protecting the marine environment.

3. CHALLENGES

In spite of many efforts and achievements in the field of oil spill response as mentioned above, there are still many challenges that the GOV must overcome to prepare properly for oil spill response in the future. In specific, the following tasks must be done:

Legislation:

- Updating and improving the National Oil Spill Contingency Plan, since the current one is only at guidance level, not a specific action plan;
- The Oil Spill Response Regulation is a valuable supplemental document for the National Oil Spill Contingency Master Plan, however there are issues still needing revision and update, which include
  - lack of definition of response areas;
  - lack of a detailed plan for responding to oil in rivers;
  - ambiguous definition of roles and responsibilities for managing and approving the oil spill response plans of local provinces and industrial projects;

For organization:

- Need for clarifying the cooperation and responsibilities between NCSR and the Ministry of Natural Resources and Environment (MoNRE) when large oil spills occur in Vietnam;
- The pace of the establishment of the three national oil spill response centers is very slow;

For resources:

- The resources and manpower of Vietnam is very limited, and does not meet the rapid development of the economy at this present, and is not adequate for a marine country like Vietnam;
These deficiencies in legislation, organization, manpower and facilities as mentioned above are great challenges for Vietnam in developing its oil spill response competence, in order to overcome such challenges, great efforts are required of the GOV and the community, as well as a need for international aid.

4. ‘MYSTERY’ OIL SPILLS IN 2007

From January to June of 2007, there were many oil slicks drifted ashore along the Vietnamese Coast in the South China Sea, continuously affecting the shoreline of more than 20 coastal provinces. The oils were discovered from the North (Bach Long Vy Island in the Gulf of Tonkin) down to the South (Ca Mau Cape). The occurrence of these spills can be summarized into 3 main periods as follows (see the map in Figure 6):

• The 1st period from January 28 to February 10: Oil slicks drifted ashore day by day in 7 provinces in the Central from Ha Tinh to Quang Ngai;
• The 2nd period from March 9 to March 15: Oil slicks drifted ashore in Ba Ria-Vung Tau and Tien Giang provinces (including Con Son Island);
• The 3rd period from mid-March to mid-June: Beached oils slicks were found in province from Binh Thuan to Ca Mau;

Important features of these oil spills:

• These oil spills occurred continuously, lasted for a long time, and sometimes recurred in one location;
• Almost all of spilled oils have their origin from crude oil and it was certain that there was more than one type of crude;
• These oil spills occurred mainly in the dry season, when the dominant wind was in NE direction. However, the weather of first six months of Vietnam in 2007 was very complex; and there were some times that the dominant wind was E or SW.

Response activities that have been implemented:

Understanding the importance of the situation, the GOV directed ministries and authorities to implement various activities to respond to these oil spills, which were:

• Requesting MoNRE to direct provincial authorities where the oil slicks had beached to collect and transfer to waste facilities for treatment and prevention of secondary pollution. Also to undertaken first steps in assessing losses to the environment, society and the economy;
• Mobilizing helicopters and naval vessels to survey oil spill locations offshore. At the same time directing the Vietnam Bureau of Maritime (VBM) to notify every seagoing vessel to identify offshore oil slicks;
• Directing Vietnam Oil and Gas Corporation (PetroVietnam) to inspect every offshore oil and gas facility and carry out activities to find out which one could have resulted in oil spill;
• Directing VBM to inspect every maritime operation which had the potential to be an oil spill sources;
• Requesting the Ministry of Foreign Affairs (MoFA) to seek relevant information from neighboring countries;
• The Ministry of Defense of Vietnam (MoD), asked the United States Department of Defense for aid in providing information (mostly satellite images) to help Vietnam to find the sources of spilled oils;
• Gather domestic scientists, experts and institutions to investigate and seek polluting sources that may cause oil slicks and to assess damages and consequential losses for the environment, society and economy of Vietnam due to these oil spills;
• Collecting samples of spilled oil and crude in production offshore from Vietnamese oil fields, and send them to laboratories in Vietnam and overseas (the US and Korea) for analysis;
• Conduct workshops to acquire opinions of Vietnamese and foreign scientists in relation to handling and responding to these oil spills.

That the recent oil spills in Vietnam have greatly affected the socio-economy and environmental quality of more than 20 coastal provinces is truly a cause for alarm for oil spill response competence of Vietnam. In our own opinion, the activities that have been done are necessary and laudable; however the more important issue is to quickly learn lessons drawn from actual situation in order to help the GOV to deal with oil spills more effectively in the future.

5. CONCLUSIONS AND RECOMMENDATIONS

With the picture of oil spill response in Vietnam as presented above, we are aware that in order for Vietnam to build up an effective oil spill response system, the following work must be carried out as soon as possible:

Improving the legislative system:

• Ratifying international conventions relevant to oil spill, with the first one being be the 1992 Fund Convention;
• Updating and improving the National Oil Spill Contingency Master Plan and Oil Spill Response Regulations;
• Developing guidelines for compensation from oil spill, particularly for domestic polluters causing oil spills;
• Developing guidelines for recovery and restoration after oil spills;

Improving the organization:

• Completing the establishment of 3 national oil spill response centers;
• Developing a marine oil spill surveillance system, especially for the distant offshore area;
• Establishing a national laboratory for the analysis and identification of oil;

In summary, it is our conclusion that, only when the GOV is able to incorporate the oil spill response efforts with the marine environmental protection strategy and the economic development strategy of the nation will it overcome challenges in the field of oil spill and achieve sustainable development.